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ABSTRACT

This summary of the activities of the third of a three-phased self-study, initiated in 1987, provides a current overview of preservation problems in the University of Southern California's (USC) Central Library System, focusing particularly on the organizational structure of the preservation activities and on recommended solutions for ensuring the survival of library collections or of their informational content. The report points to ideal standards and goals, advises reasonable alternatives and acceptable interim measures, and encourages creative thinking and openness to new uses of technological developments that will extend USC's preservation options. The implications of inaction are also described. Some of the preservation accomplishments over the last 5 years are identified, and first-year priorities are set for a preservation strategy in the context of a 5-year plan. The goals and recommendations address both preservation and treatment, with emphasis on those measures that will have the highest impact on the greatest number of materials, and yield the greatest benefit to the academic programs. (SD)

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PRESERVATION PLANNING PROGRAM

FINAL REPORT

MAY 22, 1989

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FORWARD

This Final Report concludes a year-and-a-half self-study of the preservation needs of the University of Southern California's Central Library System. The Preservation Planning Program was initiated on October 1, 1987, with the appointment of the Study Team by Dr. Charles Ritcheson, University Librarian, Dean and Vice Provost. The three-phased program, under the auspices of the Association of Research Libraries, Office of Management Studies, was guided by preservation consultant Sally Buchanan. More than ninety individuals from the library and campus contributed some of their time to the study during the past year.

The Final Report has several purposes and addresses a broad audience including the Library Administration, all library faculty, staff and student assistants, and the USC University community. It provides a current overview of preservation problems in the Central Library System, focusing in particular on the organizational structure of preservation activities and on recommended solutions for ensuring the survival of the library collections or of their informational content. It points to ideal standards and goals, recommends reasonable alternatives and acceptable interim measures, and encourages creative thinking and openness to new uses of technological developments that will expand USC's preservation options. The implications of inaction are also described. It identifies some of the preservation accomplishments over the last five years and sets first year priorities for the Preservation Program in the context of a five year plan.

The goals and recommendations in the Final Report address both prevention and treatment, with emphasis on those measures which will have the highest impact on the greatest number of materials and with the greatest benefit to the academic programs. The Preservation Program implies a sustained and systematic strategy for ensuring that the library materials will be accessible in the near future and beyond for all students and scholars at USC.

The self-study and this report should be regarded as only the first step toward defining the challenges and advancing the Preservation Program. The Study Team hopes that it will serve as a guide to the establishment of the new Preservation Unit and that it will be consulted by all who participate in the program.

ACKNOWLEDGEMENTS

The Preservation Planning Program Study Team acknowledges the participation of numerous members of the USC library staff and other USC staff and affiliates in the gathering and provision of information that has made this report possible. We particularly thank those individuals who participated on the six task forces and those staff and parent volunteers who participated in the Physical Condition of the Collections survey. Their names are mentioned below. Thanks are due also to Nannette Edelman, for secretarial assistance, Steve Elder for publicity, John Farrell, University staff writer, for his excellent article in the *Transcript*, and to Jessica Hawks for assistance in printing the task force reports and drafts of this Final Report.

During the year special interviews were conducted with USC faculty and administrators who offered important information and insights regarding the mission of the University and the Library useful to our analysis of the preservation needs of USC: Doyce Nunis, Professor of History and Chair, University Library Committee; Jerome Walker, Associate Provost and editor of the *USC Reaccreditation Self-Study, 1986: Design for Leadership*; Assistant University Librarians: Lynn Sipe, Collection Development; Judy Ganson, Technical Services; Joyce Toscan, Public Services; and Deputy University Librarian, Philip Tompkins. Continued guidance throughout the study was provided by Sally Buchanan our preservation consultant from the Association of Research Libraries, Office of Management Studies and internationally recognized preservation authority. Presently she is Assistant Director of Preservation Services at the University of Pittsburgh. Charles Ritcheson, University Librarian, Dean and Vice Provost, provided the impetus and support, without which this study would not have been possible. To everyone we extend our appreciation and gratitude for your commitment to the preservation of our library collections.

The Preservation Planning Program Study Team

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Final Report of the Preservation Planning Program attempts to bring the preservation needs of the USC Central Library System into focus and to chart a course for the immediate future. The proposed program outlined and prioritized in the Summary of Goals and Recommendations for Action, in the pages following the Executive Summary, identifies five primary goals and thirty-five objectives to accomplish these goals.

Priorities were determined by analyzing our earlier Background Report and the six separately issued task force reports, by researching accepted preservation standards and practices, by weighing alternatives, and, finally, by giving careful consideration to realistic and achievable solutions to USC's preservation problems. The goals are ambitious but attainable.

PRESERVATION PROBLEMS FACING USC

USC's library collections, and those of other research libraries nation-wide, are in danger of loss or deterioration from poor storage conditions, by wearing out through improper or careless handling and use, or by perishing in a natural or man-made disaster. The greatest single dilemma, however, is caused by the materials themselves, particularly the fragility and instability of the paper-based books, serials and other documents which predominate in USC's library collections. Since the mid-nineteenth century and continuing into the twentieth century, paper has been manufactured using wood pulp with high acid content, causing it to eventually become embrittled and to ultimately crumble into dust.

Our study of the physical condition of our collections determined that 16% of our books and serials are in poor or deteriorated condition and demand immediate attention. This represents 377,000 volumes of the collection. Another 32%, or 753,000 volumes, are in fair condition and are not expected to survive beyond the next decade without some form of preservation treatment. For the remaining 52% in good condition, essential preventive measures are recommended that will extend their life and reduce the need for more costly treatments in the future. Although the magnitude of the problem for USC is astounding, our collections are in relatively good shape when compared with those of other research libraries, especially those on the East coast (see chart in the summary of Task Force B in this report). Various factors contribute to this. The differences in climate and the age of the collections compared in the chart are two possible explanations.

PRESERVATION SOLUTIONS

To avert this "cultural suicide" the national library and scholarly communities are directing intensive efforts toward solutions that will preserve our cultural

heritage. Such efforts include mass deacidification, microfilming, use of alkaline paper, and electronic and optical conversion in order to reformat and capture the intellectual content of endangered materials. For materials with intrinsic or artifactual value (rarities and unique items), specialized conservation or restoration treatments also have been developed and are continuing to be improved.

Research into alternatives for saving the written record as well as methods of protecting photographs and other visual media, maps, sound recordings, computer software, and other types of non-book materials has increased significantly in the last decade. Publications on preservation and conservation are proliferating rapidly (see "Suggested Readings and Viewings"). Conferences, seminars, workshops and other professional meetings are being held to educate and to increase awareness of the crisis and the solutions. The National Commission on Preservation and Access reports that approximately fifty academic libraries in the United States have implemented preservation programs. The search continues for optimum methods of saving the recorded knowledge of this and past generations. With the implementation of our Preservation Program, USC responds by joining in the search.

RESPONSIBILITY FOR PRESERVATION

USC, as a major research institution, has an inherent obligation as part of its academic and cultural mission, to protect and preserve its library's collections. It must be done in the best and most affordable way possible so that collections will be accessible to scholars and students now and in the future. Preservation of the Library's collections is clearly a responsibility of the entire University community. It is essential to integrate preservation into our way of thinking about the Library and into daily activities that bring us into contact with library materials.

It also must be assumed that substantial growth of preservation efforts is contingent on support in the form of increased funding, and these efforts must be based on requests that are competitive with other program initiatives throughout the University. Although there is much that the Library can do to begin the program with resources on hand in the coming year (see "Priorities for Action: 1989-1990"), long-range preservation goals will not be achieved unless present funding and staffing levels are increased to accomplish the essential projects and to effect new levels of responsibility required of a staff already stretched to its limits. Therefore, additional funding must be obtained from the University and from other sources. Grants, special fund-raising efforts, contributions designated for preservation to accompany book donations, and endowments are some of the many alternatives (see also Appendix G: Grant Sources).

Preservation is neither an all or nothing proposition, nor a one time infusion of effort and funds. It requires an ongoing commitment to new projects, methods and procedures in order to protect the significant and substantial investment in knowledge and information resources, estimated at about \$200 million.

PRESERVATION MILESTONES: 1984 - PRESENT

Several important milestones in the development of USC's Preservation Program are mentioned in the Introduction. The six task force reports also note in more detail the strength and available resources of our Central Library System and of the University. The important news is that we have begun to address our preservation problems.

A member of the library faculty, recently trained in Columbia University's Preservation Administration Program, has been designated to coordinate the Preservation Program. Preservation has been identified as one of the goals in the Library's major planning document, *A Library System for a University of Excellence*. The Library joined the Los Angeles Preservation Network (LAPNet) in 1988. Several members of the library staff have attended meetings and workshops on disaster preparedness and other preservation-focused events. Some fundamental improvements have been made in various buildings and facilities that have begun to control environmental conditions. Creative thinking about preservation uses of automation capabilities is underway, as well as a few first steps to address the brittle-book problem, e.g., preservation microfilming through USC's membership in the Research Libraries Group (RLG). The Preservation Program will build on these accomplishments in addressing the needs identified in this report.

GOALS FOR USC'S PRESERVATION PROGRAM

The preservation goals and recommendations might be summed up in these five key words: Coordination, Priorities, Prevention, Education and Cooperation.

Coordination: Establishment of a Preservation Unit, headed by the Preservation Librarian, will provide essential coordination for the Library System's preservation effort and permit the development of a programmatic approach, as opposed to isolated and fragmented activities. Goal I offers a detailed phase-in plan.

Priorities: Selecting priorities based on clearly articulated collection development policies will greatly assist us in making difficult, but essential, choices about which materials or collections to target for preservation or to rescue in the event of a disaster. Selectors and other University faculty working closely with the Preservation Librarian in the acquisition/collection development process will assist in moving in a well-chosen direction. Goal II suggests a variety of approaches.

Prevention: Fifty-two percent of the collection is in good condition yet in need of protection as well. In order to maintain and extend its longevity and delay further deterioration or damage, we must take immediate preventive measures. These include monitoring and improving environmental conditions in buildings and facilities that house library materials, purchase of preservation-safe equipment and supplies, and disaster planning. It also implies close coordination with the

Department of Operations and Maintenance. Goal III analyzes and describes preventive measures.

Education: A multitude of avenues exist for offering the critical training for staff and outreach to library users essential for fostering a sense of pride in the libraries and conveying information about preservation-safe methods and techniques. Certain key staff positions will require specialized training in new methods. Preservation components might be added to library tours and bibliographic and course related instruction to inform library patrons about proper handling and treatment of library materials. Goal IV focuses on these issues.

Cooperation: The magnitude of the preservation problem is simply too great for any one library, no matter how large, to solve. Shared resources and expertise, and coordinated planning are essential to the success of any significant preservation effort. While libraries in the past have often viewed themselves as independent, autonomous entities, this type of thinking is rapidly changing. Cooperative efforts are now underway at all levels. The USC Library has a unique opportunity to take a leadership role, especially among private institutions of higher learning, through the Electronic Library Consortium. Examples of cooperative preservation activities include building a shared mass-deacidification facility, participating in workshops and staff training, cooperative microfilming, and developing programs for cooperative information and resource sharing. Goal V details suggested approaches.

Lastly, this Final Report is designed and structured as a tool to educate and inform the University community about the various aspects of preservation. It proffers practical solutions and alternatives for USC. It suggests basic sources of published information for those individuals interested in exploring the problem more in-depth. Finally, it brings our Preservation Planning Program to a closure and readies us for the next stage, that of implementation.

SUMMARY

GOALS AND RECOMMENDATIONS FOR ACTION

GOAL I: ORGANIZATION OF THE PRESERVATION UNIT

GOAL II: LIBRARY COLLECTIONS

GOAL III: BUILDINGS, FACILITIES, EQUIPMENT

GOAL IV: STAFF AND USER EDUCATION

GOAL V: LEADERSHIP, INNOVATION AND COOPERATION

SUMMARY OF GOALS AND RECOMMENDATIONS FOR ACTION

GOAL I. ESTABLISH PRESERVATION UNIT WITHIN COLLECTIONS DIVISION TO COORDINATE ALL PRESERVATION ACTIVITIES OF THE CENTRAL LIBRARY SYSTEM

- A. CREATE PRESERVATION UNIT, HEADED BY PRESERVATION LIBRARIAN, WITHIN COLLECTIONS DIVISION, REPORTING TO AUL FOR COLLECTION DEVELOPMENT
- B. ESTABLISH PRESERVATION PROGRAM, COORDINATED BY PRESERVATION LIBRARIAN, CONSISTING OF: PRESERVATION UNIT; PRESERVATION LIAISON NETWORK; PRESERVATION POLICY COMMITTEE; TASK FORCE ON DISASTER ACTION PLAN; DISASTER ACTION TEAM
- C. ESTABLISH A BUDGET FOR PRESERVATION PROGRAM
- D. ORGANIZE THE PRESERVATION UNIT IN THREE SECTIONS:
 - 1) COMMERCIAL BINDING SECTION
 - 2) CONSERVATION LAB (in-house mending and binding and paper repair)
 - 3) FILMING/TEXT PRESERVATION SECTION (microfilm and copy for preservation)
- E. HIRE QUALIFIED KEY STAFF TO IMPLEMENT PRESERVATION PROGRAM:
 - 1) HEAD CONSERVATOR (Conservation Lab)
 - 2) CLERK/SECRETARY (Preservation Unit)
 - 3) BINDING TEAM ASSISTANTS (2) (Commercial Binding Section)
 - 4) HEAD, PRESERVATION REPLACEMENT
 - 5) BOOK CONSERVATOR AND PAPER CONSERVATOR FOR FULL-SCALE MATERIALS TREATMENT PROGRAM (Conservation Lab)
- F. INCORPORATE PRESERVATION RESPONSIBILITIES INTO JOB DESCRIPTIONS OF ALL LIBRARY STAFF
- G. ESTABLISH UNIVERSITY PRESERVATION ADVISORY COMMITTEE, REPORTING TO THE UNIVERSITY LIBRARIAN

GOAL II. RECOMMENDATIONS TO PRESERVE, PROTECT AND EXTEND THE LIFE OF THE USC LIBRARY COLLECTIONS

- A. CREATE LIBRARY-WIDE COLLECTION DEVELOPMENT POLICIES TO GUIDE PRESERVATION DECISIONS
- B. PROVIDE IMPROVED SAFETY AND DISASTER PREPAREDNESS FOR THE COLLECTIONS
- C. ESTABLISH BRITTLE-BOOK PRESERVATION PROGRAM
- D. IMPROVE METHODS OF HANDLING, SHIFTING AND TRANSPORTING MATERIALS

SUMMARY OF GOALS AND RECOMMENDATIONS FOR ACTION

- E. PROVIDE BINDINGS AND PROTECTIVE COVERINGS FOR ALL MATERIALS**
- F. IMPROVE SHELVING METHODS AND TECHNIQUES**
- G. THOROUGHLY CLEAN COLLECTIONS TO SLOW DETERIORATION AND PREVENT VERMIN INFESTATION**
- H. ACQUIRE BACK-UP COPIES AND DUPLICATES OF CERTAIN BOOK AND NON-BOOK MATERIALS WITH LONG-TERM RESEARCH VALUE OR HIGH USE**

GOAL III. PROVIDE PROPER STORAGE ENVIRONMENTS IN LIBRARY BUILDINGS AND FACILITIES AND EQUIPMENT THAT CONTRIBUTE TO EXTENDING THE LIFE OF ALL LIBRARY MATERIALS

- A. MAINTAIN ROUND-THE-CLOCK TEMPERATURE AND HUMIDITY-CONTROLLED ENVIRONMENTS AND ESTABLISH MONITORING PROGRAM**
- B. INSTITUTE FIRE PREVENTION/DETECTION/SUPPRESSION SYSTEMS AND OTHER DISASTER-PREVENTION METHODS**
- C. PROVIDE WATER-DAMAGE AND FLOOD CONTROL IN LIBRARY FACILITIES**
- D. CARRY OUT PRESERVATION PLANNING AND PRESERVATION IMPACT STUDY OF NEW TEACHING LIBRARY ON CENTRAL LIBRARY SYSTEM**
- E. ACQUIRE SPECIAL PRESERVATION-QUALITY EQUIPMENT AND SUPPLIES**
- F. PROTECT AGAINST ULTRAVIOLET RAYS AND LIGHT-INDUCED HEAT**
- G. RENOVATE SPACE IN EAST LIBRARY TO ACCOMMODATE AND EQUIP PRESERVATION UNIT FACILITIES; INCORPORATE LONG-RANGE PLAN FOR FULL-SERVICE CONSERVATION LAB, COMMERCIAL BINDING AND PREPARATIONS SECTION, AND FILMING/TEXT PRESERVATION SECTION**
- H. IMPROVE PHOTOCOPY SERVICES TO REDUCE DAMAGE TO LIBRARY MATERIALS**
- I. INSTALL PROPER AND ADEQUATE SHELVING AND STORAGE CABINETS (for book and non-book materials)**
- J. IMPROVE HOUSEKEEPING MEASURES**
- K. ESTABLISH GUIDELINES FOR PRESERVATION-SAFE EXHIBITS AND DISPLAYS**

GOAL IV. ENHANCE STAFF AND USER PRESERVATION EDUCATION AND AWARENESS TRAINING

- A. DEVELOP PRESERVATION ORIENTATION TRAINING FOR ALL LIBRARY EMPLOYEES**
- B. SUPPORT AND FUND STAFF PROFESSIONAL DEVELOPMENT ACTIVITIES AND ATTENDANCE AT LOCAL, REGIONAL AND NATIONAL PRESERVATION MEETINGS AND WORKSHOPS, PARTICULARLY IN THE INITIAL FIVE-YEAR START-UP**
- C. EXTEND PRESERVATION AWARENESS TO ALL LIBRARY PATRONS AND CAMPUS COMMUNITY**
- D. DISSEMINATE INFORMATION ABOUT PRESERVATION AND USC'S ACTIVITIES THROUGH LIBRARY NEWSLETTERS AND OTHER CAMPUS PUBLICATIONS AND NEWS MEDIA**
- E. SPONSOR GUEST SPEAKERS RELEVANT TO PRESERVATION AND CONSERVATION**

GOAL V. LEADERSHIP, INNOVATION AND COOPERATION

- A. PARTICIPATE ACTIVELY IN THE LOS ANGELES PRESERVATION NETWORK (LAPNET)**
- B. PLAY AN ACTIVE ROLE IN NATIONAL COOPERATIVE PROGRAMS THROUGH RESEARCH LIBRARIES GROUP, AMERICAN LIBRARY ASSOCIATION AND NATIONAL COMMISSION ON PRESERVATION AND ACCESS**
- C. EXPLORE COOPERATIVE PRESERVATION LINKS WITH ELECTRONIC LIBRARY CONSORTIUM**
- D. DEVELOP GRANT PROPOSALS TO SUPPORT LONG AND SHORT-TERM PRESERVATION AND CONSERVATION PROJECTS**
- E. DEVELOP PRESERVATION ACTIVITIES WITH FRIENDS OF THE LIBRARY AND OTHER CAMPUS AND COMMUNITY GROUPS**

SUMMARIES

TASK FORCE CHARGES AND REPORTS

- TASK FORCE A: ENVIRONMENTAL CONDITIONS**
- TASK FORCE B: PHYSICAL CONDITIONS OF THE COLLECTION**
- TASK FORCE C: ORGANIZATION OF PRESERVATION ACTIVITIES**
- TASK FORCE D: DISASTER CONTROL**
- TASK FORCE E/F: PRESERVATION RESOURCES / STAFF AND USER
EDUCATION**
- TASK FORCE G: INTERINSTITUTIONAL COOPERATION**

TASK FORCE CHARGES AND SUMMARIES

TASK FORCE A: ENVIRONMENTAL CONDITIONS

The primary charge to the Environmental Conditions Task Force was to execute a study of the environmental conditions in areas of the Library system where library materials are housed.

The Task Force held their meetings in several library locations to observe the environmental problems first hand. They also created and distributed 150 copies of a questionnaire to provide an opportunity for library staff to comment on existing environmental conditions in the various facilities. The responses served as a basis for selecting sites for temperature and humidity readings. Task Force members compiled descriptions of the responses to each question. All locations which did not respond were contacted directly for observations.

Based on responses to the questionnaire and in an effort to represent the variety of locations and collections on campus, the Task Force selected twelve library sites in which to monitor temperature and relative humidity over a two week period. The number of sites was limited to the availability of psychrometers, number of members on the Task Force and time required. The site selection was coordinated, as feasible, with locations being studied by the Task Force on Physical Condition of the Collections.

Due to time and other constraints, light levels were not checked in any library location; however, the lack of ultraviolet filters on fluorescent tubes, as well as non-existent or inoperative blinds, indicates that lighting levels are problematic.

They concluded that environmental conditions within library facilities exert a tremendous influence on the physical condition of the collection. Temperature, relative humidity (RH), light, pollutants and particulate matter all affect the preservation of library materials by changing their chemical structures. Additionally, radical temperature and humidity fluctuation can cause mold and mildew and attract insects and vermin.

USC is fortunate to be located in an arid climate which discourages most mold and mildew. Nevertheless, other conditions may still cause damage if not controlled.

Temperature affects library materials in two ways: chemical reactions double with each increase of 10°C (18°F), causing more rapid deterioration; and it has a direct effect on relative humidity levels. With variations in RH, moisture moves in and out of hygroscopic materials such as paper, cloth and leather, causing structural damage. Levels above 65% RH promote growth of fungi and increase chemical reactions, while levels below 20% contribute to desiccation and embrittlement. Continual fluctuations in both temperature and RH are especially damaging, because the materials can never reach an equilibrium with their surrounding environment.

Ultraviolet light, either from daylight or fluorescent lamps, also contributes to preservation problems. Light damage is cumulative and irreversible.

Gaseous pollutants such as sulfur dioxide, nitrous oxides and ozone are absorbed from the air into paper. Particulate matter, such as dust, dirt and smoke will soil and abrade library materials, in some cases acting as a medium to fungal growth.

Insects and vermin, including cockroaches, silverfish, termites, and rats, eat organic library materials if no other food sources are available.

Their report provides detailed descriptions of the USC library facilities, by unit or collection location, which hold materials for at least a week or more. The descriptions also include information about available HVAC (heating, ventilation and air conditioning) systems, a sample of their questionnaire, summaries of responses, and psychrometer readings summaries and charts by location.

TASK FORCE B: PHYSICAL CONDITION OF THE COLLECTIONS

The primary charge was to answer two fundamental questions:

- A. How many kinds of physical problems exist within the collection and what are they?
- B. What percentage of the material in a group exhibits the two or three most significant problems?

The Task Force enumerated the types of materials in the collections, approximated quantity, level of use, and special handling characteristics. They determined that the scope of the detailed survey should focus on paper-based print materials because of the overwhelming preponderance and much greater use of this type of library material compared to other formats in the collections. This preponderance has existed throughout the entire history of USC's collections and is likely to remain so in the next decade.

The task force carried out their work in two phases. They surveyed twenty-one locations in the first phase and sixteen in the second and more intensive phase, eliminating collections showing little deterioration. The evaluation process was the same as that used by Stanford University in their 1979 survey of the Green Library Stack collection but with the addition of a fourth characteristic for evaluation, that of mutilation.

The data from the survey in each library or collection, when weighted by the actual number of volumes in a given location, yielded the following results for the USC collections as a whole: 52% of the books are in good condition and warrant no immediate attention; 32% of the books are in fair condition, i.e., they exhibit one or more non-acute problems such as yellowing of paper, worn covers, or loosened bindings; 16% of the books are in poor condition and demand immediate attention or risk the danger of irreparable deterioration within the next five years. Many of these "deteriorated" books are in such poor condition that the only use left to them is that of microfilming.

If we compare USC to other institutions which have undertaken surveys or otherwise estimated the deterioration of their collections, we find that USC is in

relatively good shape. Here follow the portions of various collections reported to be in poor (embrittled) condition:

- 16% USC (survey)
- 25% Library of Congress, General and Law collections (survey)
- 27% Stanford (survey)
- 30% Library of Congress, all collections (estimate)
- 30% Columbia (estimate)
- 30% Northwestern (survey)
- 37% Yale (survey)
- 40% Harvard (estimate)
- > 50% New York Public Library (estimate)

Rather than view these comparative numbers with relief that USC is in such "good" condition and that no urgency is involved, bear in mind that the number of books actually estimated to be in a completely deteriorated state at USC, based on the results of this survey, is 377,000 volumes. How fast the collections continue to deteriorate is open to argument; however, fully 753,000 volumes are perched on the edge of complete deterioration and, if no action is taken, will degenerate to that state by the end of the twentieth century, increasing the total number of deteriorated items to more than a million volumes.

The recommendations from the Task Force were based on these figures and cover preventive measures as well as treatments for endangered book and non-book materials. The Task Force report includes extensive graphs recording the results of the survey, useful definitions of terms used in the report, compilation of survey data, and a sample survey form.

The most serious single problem with the collections at USC, confirmed by the survey, is the embrittlement of the books. This is the natural outcome of books produced from highly acidic paper, a common practice since the middle of the nineteenth century and continuing even today. The publishing industry has been creating, and continues to create, time bombs of books which inexorably become embrittled after only thirty to fifty years. Acidic paper is an even greater problem in Asia and Latin America, causing books originating from these areas to deteriorate at an even faster rate. This is a sobering reality when one realizes that two important research collections at USC are the East Asian collection and the Boeckmann Iberian and Latin American collection. On the other hand, USC has been fortunate in being able to afford superior commercial library bindings for some of the collections in the past and it is recommended that this activity not diminish. In fact, it has been observed during the survey that most commercial library bindings outlast the pages themselves.

The USC libraries surveyed ordered from best to worst by percent of surveyed volumes in poor condition and those ordered by number of volumes in poor condition (extrapolated from the survey percentage results) are cited in the chart below.

USC Collections Rated by Overall Volume Condition

Collection	% volumes in			Collection size as % of total USC	ranking (1 = worst)	
	good	fair	poor		by % vols. in coll.	by % vols. in USC
East Library, Storage	19	44	37	11.9	2	1
Doheny Stacks	58	29	13	25.5	9	2
Special Collections	27	13	60	3.1	1	3
Hancock Library	47	28	25	4.4	5	4
Boeckmann Center	34	41	25	4.2	4	5
Education Library	49	31	20	5.1	7	6
Government Documents	73	15	12	7.0	10	7
Hoose Library of Philosophy	44	32	24	3.2	6	8
Science and Engineering Library	60	34	6	9.8	13	9
East Library, Regional Cultural History	62	5	33	1.7	3	10
Music Library	56	29	15	2.3	8	11
College Library	57	34	9	2.5	11	12
Von KleinSmid Library	51	47	2	9.3	16	13
Crocker & Accounting Libraries	79	18	3	4.2	15	14
Cinema/TV Library	67	26	7	1.3	12	15
Architecture and Fine Arts Library	55	42	3	2.4	14	16
Social Work Library	63	37	0	1.3	17	17
Doheny Reference	80	20	0	0.4	18	18
Gerontology Library	97	3	0	0.4	19	19

TASK FORCE C: ORGANIZATION OF PRESERVATION ACTIVITIES

The primary charge was to answer two fundamental questions:

- A. How are preservation activities presently organized in the USC Library System?
- B. How should preservation activities be organized to better address the preservation issues faced by the USC Library System?

In fulfilling this charge the Task Force carried out a library-wide survey combined with site visits, resulting in an inventory of current USC preservation activities, including the number of full-time equivalent staff and approximate expenditures related to preservation.

They concluded that the current approximate annual expenditure of \$461,782.26 represented staff activities in all units in shelving, storage and handling. About \$130,000 was spent in 1988 on other preservation areas such as contractual preservation services, in-house microfilming and conservation treatment, mending, binding and conservation supplies, and equipment for all units. Thus it was concluded that little, by comparison, was spent on physical care such as cleaning of

collections, disaster planning, treatment of materials, and monitoring of environmental and physical conditions.

The Task Force identified strengths and weaknesses of preservation activities in the present organizational structure, impacting the effectiveness or lack thereof of these activities.

Among the strengths they pointed to were an established program of commercial binding, in-house binding and limited mending; the Micrographics Department with capability and expertise to do in-house microfilming and photocopying for text preservation; and staff knowledgeable about preservation issues and storage techniques, recruited in recent years within Special Collections, Hancock Library, and the Schoenberg Institute.

Specific weaknesses identified:

1. Preservation activities are scattered unevenly throughout the organization and lack coordination, focus and goals
2. Preservation activities are carried out on an item-by-item basis rather than programatically
3. Preservation policy and procedure manuals are lacking
4. There is no preservation education program for staff and patrons
5. Preservation responsibilities are not designated in job descriptions
6. There is a general lack of communication about those preservation activities that are carried out
7. There is insufficient staff, a lack of funds, supplies and most basic equipment, such as proper types of book trucks and book ends, to carry out rudimentary preservation
8. There is a shortage of space to house preservation materials and carry out preservation activities
9. There is virtually no restoration or treatment of rare, fragile or archival materials
10. There is a lack of a planned exhibits program which utilizes proper display techniques
11. There is no environmental monitoring and adjustment of temperature and humidity in facilities housing materials
12. Preservation filming is rarely done because it must come out of a unit's book funds, which are inadequate

The Organization Task Force examined the organization of preservation in other libraries and weighed the advantages and disadvantages of three models: Collection Development model, Technical Services model, and Separate Unit model.

They concluded that the Collection Development model is most appropriate for USC. It presents advantages for strengthening collection development and achieving collection management, advantages not provided by the other models. They also presented a comprehensive long-range plan for organizing preservation at USC with a comparison of the present organization.

TASK FORCE D: DISASTER CONTROL

The primary charge was to answer two fundamental questions:

- A. What are the kinds of disasters, crises, and accidents that could have a detrimental effect on materials in the USC collections?
- B. What is the USC Library System's current level of preparedness for such disasters?

The Task Force determined that although there is a wide range of possible disasters that could affect the USC collections, and a shorter list of ongoing problems that in some cases have plagued the USC libraries for years, essentially the Central Library System has been quite fortunate in avoiding a major disaster. This is not so true for other libraries as historical background illustrates. The statistics for library disasters by fires are staggering. The National Fire Protection Association reported at least 410 fires annually involving libraries and damages totalling in the tens of millions. The tragic loss of over 400,000 volumes in the 1986 Los Angeles Public Library fires alone caused an estimated \$24 million loss.

The three major potential problems for USC are from earthquakes and associated problems, fire, and water (fire-related flooding from sprinkler systems or rain, broken water pipes or air conditioners). Other threats to the collections might include explosions and sudden major vermin infestations (particularly from newly acquired collections which have not been fumigated). The latter is the only preventable disaster.

Historical problems at USC include only minor damage from earthquakes in 1971 and 1987, minor contained fires in Doheny Library (University Librarian's office) and East Library (first level) in 1987, and water damage in several locations during 1986 and 1987.

Strengths Identified:

Among the strengths are a dedicated library staff with appreciation for the importance of preservation in a research library; growing collective awareness by the Library and campus administration of the potential threat of disaster to the Library system; improvements in some library facilities with regard to structural reinforcement (Education Library), new fire alarm system (Doheny), some automatic sprinklers or Halon systems, new emergency exits, improvements to Doheny's electrical system, emergency back-up power for the Library's computer system and offsite storage for back-up copies of the Library's online catalog and software.

Weaknesses identified:

1. Response time from University personnel during a crisis has been slow or non-existent
2. Some library shelving is inadequately braced or reinforced
3. Unresolved problems relating to internal water pipes and external sprinkler systems may lead to a disaster

4. Many library collections lack fire detection/suppression systems
5. The Central Library System lacks a coordinated disaster plan for the collections, disaster response training and necessary disaster supplies
6. There is a lack of systematic inspections of buildings when libraries are closed so that small problems that might develop into disasters are averted
7. Electrical circuits in many library areas need to be modified to avoid potential fire damage

The Task Force concluded that, given the predictions of a major earthquake (Richter 8 to 8.3) within the next ten years in Southern California and the recent Los Angeles Public Library fires and others, it is wise to assume that either or both could cause severe damage to the USC collections and restrict service and access to the collections. Also in view of the more frequent yet minor damage by water and flooding in numerous areas of the Library System in the past three years, disaster preparedness should be a major immediate emphasis of our preservation program.

TASK FORCE E/F: PRESERVATION RESOURCES/STAFF AND USER EDUCATION

The primary charge to this Task Force was to answer two fundamental questions:

- A. What preservation resources exist in the USC community?
- B. What preservation related training activities exist in the USC libraries and how may these activities be improved?

In responding to their charge, the Task Force surveyed the availability of preservation publications at USC, preservation resources on campus, and preservation resources in the Los Angeles basin.

They concluded that the library has substantial holdings and relevant publications needed to inform and instruct staff in preservation. Also during the Preservation Planning Program study, many new titles were added to the collection. Thus a core collection exists on which to build in the future.

USC, located in the center of Los Angeles, has access to preservation supply and equipment sources and vendors. Also the vendors are increasingly familiar with the preservation crisis, particularly because of the recent Los Angeles Public Library fires, and because of contacts with preservation staff at several local institutions. The newly established Los Angeles Preservation Network is seen as a valuable source of information and advice on coping with preservation problems.

The second part of the charge was to determine the extent and effectiveness of staff and user preservation education programs within the Central Library System. The Task Force surveyed all units in the Library system and concluded that only minimal efforts currently exist for staff and student assistants. There is very little user education. The Schoenberg Institute Archive, Hancock Library, Cinema/TV Library, Micrographics, Special Collections, Gifts and Exchange and the Boeckmann Center provide some instruction based on the special requirements of these collections. Most units have increased staff awareness in identifying materials

needing repairs, provide some training in proper handling of library materials and enforce the "no food and drink" policy.

Appendices to their report include: a bibliography of preservation publications at USC, local campus resources (individuals), services in the community, local institutions and programs related to preservation, basic conservation supplies, distributors, disaster kit supply lists, and a copy of their survey form.

TASK FORCE G: INTERINSTITUTIONAL COOPERATION

The primary charge of the Task Force was to answer the following questions:

- A. In what manner does the USC Library System currently engage in interinstitutional cooperation?
- B. What existing organizations are there that have cooperative programs that USC is not currently aware of or taking part in at present?
- C. Is there a need for forming a local or regional cooperative preservation organization beyond what may exist at the present time?
- D. What role should the USC Library System take in cooperative preservation ventures?

The Task Force surveyed thirty-four public and private colleges and universities, museums, societies and other organizations in Southern California and received and tabulated responses. The results indicated that preservation activities vary greatly among institutions from rudimentary to highly developed. Many institutions cited lack of funding as the major reason for lack of preservation efforts. Not surprisingly, the Getty Institute and the Huntington Library, with extensive significant research collections, have highly developed preservation programs. Among the institutions surveyed, fewest responses were received from the state-funded colleges and universities and the greatest interest shown was from the private colleges, primarily those within the Electronic Library Consortium.

They concluded that USC has a unique opportunity to take the lead in cooperative preservation, particularly with the private liberal arts colleges in Southern California, in founding a preservation consortium. Such a group might make significant advances toward dealing with the growing problem of deteriorating books through a creative partnership. They suggested that USC should establish a conservation laboratory as part of this goal and seek grant funds for more ambitious cooperative efforts.

The private colleges indicated most interest in joint microfilming, shared disposal of nitrate film stock (a hazardous waste), sharing of preservation information, and joint education and training programs.

The Los Angeles Preservation Network (LAPNet), founded in early 1987 by preservation officers and librarians in the Los Angeles area, is the only cooperative group related to preservation issues in Southern California at the time of the study. USC joined the group in 1988. Several USC librarians have attended LAPNet workshops and meetings in the past year. One member of the Study Team has

recently been appointed to officially represent USC in LAPNet. He will be joined by the new Preservation Librarian in the coming months. Once the Preservation Librarian is in place, USC will become more actively involved in this group. LAPNet's current focus is on disaster preparedness, important for USC as well as other libraries in the area.

The Task Force also identified and described national-level organizations with preservation programs in which USC may actively participate such as the Research Libraries Group (RLG), the Library of Congress, the National Commission on Preservation and Access, and the American Library Association. They listed sources of grant funding for preservation and provided a list of basic preservation/conservation supplies to assist USC in getting started with our program. (Appended to this Final Report are selected grant sources (Appendix G) and a list of suggested basic supplies (Appendix E).)

INTRODUCTION

INTRODUCTION

INSTITUTIONAL AND LIBRARY SETTING

The University of Southern California and its Library were established in 1880. The Library opened its doors with 700 volumes the first year. Over one hundred years later, the University is a large complex organization, consisting of the University Park Campus and the Health Sciences Campus. The Central Library System now contains more than 2.4 million volumes, not including the Medical, Dental and Law Libraries, and is housed in twenty-four locations on the University Park Campus.

Total enrollment of the University is over 26,000 undergraduate and graduate students with 1,200 faculty. USC offers degree programs in a wide variety of disciplines, including undergraduate and graduate programs in the liberal arts and sciences, and in numerous professional fields.

Broadly stated, the goals of the University are to provide an atmosphere conducive to the creation of knowledge, to expedite the process of transferring information from the scholarly community to the student, and to, in general, improve society. In recent years in fulfilling these goals, the University has focused its efforts on improving undergraduate instruction, encouraging growth of graduate education and research, advancing the status of selected professional schools, such as Business, Law, and Gerontology, and has furnished opportunities for extended education, through a restructured system which decentralizes responsibility to the academic units.

Teaching and research are the two principal missions which the University Libraries support with their collections and services.

The Central Library System consists of a central unit, the Doheny Memorial Library, the major research facility for the humanities and many of the social sciences, and a number of specialized subject libraries. Housed within the Doheny building are major interdisciplinary research collections and special subject libraries such as the main Reference Department, the Department of Special Collections (including the Feuchtwanger Memorial Library and the Horton Rare Book Room), the Boeckmann Center for Iberian and Latin American Studies, the Cinema/TV Library, the Music Library, the Periodicals Reading Room, the College Library, and the Micrographics Department. Housed in separate facilities are the Von KleinSmid Library, the Education Library, the Social Work Library, the Architecture and Fine Arts Library, the Hoose Library of Philosophy, the Business Library, the Gerontology Library, the Hancock Library of Biology and Oceanography, and the Science and Engineering Library. The East Library, the principal remote storage facility, also houses the University Archives, the Regional Cultural History Collection and selected other library collections.

The administration of the Central Library System, which reports to the Office of the Provost, includes the University Librarian (who also holds the titles of Dean

and Vice Provost), the Deputy University Librarian, four Assistant University Librarians for Collection Development, Technical Services, Public Services, and Administrative Services, the Deputy Assistant University Librarian for Academic Information Services, and the Director of the Center for Scholarly Technology. A professional staff of 56 and a support staff of 114 provide a wide variety of services common to major research libraries. The total annual library budget is over \$10 million and annual book and serials expenditures are approximately \$3.2 million, with an additional \$110,000 allocated for commercial binding in fiscal year 1988-89.

Last year the Central Library System reported over 24,000 active borrowers, of which more than 12,000 were undergraduate students, close to 7,000 were graduates and 3,300 were faculty and staff. Circulation transactions numbered 660,000 indicating heavy use of the collections.

The mission of the USC Libraries, as stated in *Designs for Leadership*, is to support instruction and research at the University by collecting, preserving, and disseminating recorded knowledge through both automated and conventional services.

The University has designated sixteen subject areas for building or maintaining at the research level. These areas are Cinema, Fine and Performing Arts Criticism, Iberian and Latin American Studies, Philosophy, American Literature, East Asian Studies (especially Korean Studies), Southwestern United States Culture and Politics, Linguistics, Neurobiology, Robotics, Gerontology, Classics, Electrical Engineering, Marine Petroleum Geology, Swiss-German Literature, Exile Studies, and Hydrocarbon Chemistry.

In support of the instructional mission are, most obviously, the planned construction of the state-of-the-art Teaching Library, the Library Satellites, and the increasing efforts to meet student demands for improved services, longer hours, more study space, and even greater emphasis on security for the patron and the collections.

SERIOUSNESS OF PRESERVATION PROBLEMS AT USC

Analysis of the findings of the preservation situational review and the task force reports uncovered the fact that USC suffers from nearly every conceivable preservation problem. As the goals and recommendations indicate, some of the problems need to be addressed independently, other sequentially and still others may have to be postponed or delayed for the future.

Many recommendations in this Final Report require additional commitments in time from the library staff for training, formation of policies and procedures, evaluating, cleaning, weeding, and reshelving the collection, and educating library patrons. Preservation activities will ultimately improve overall service but it will require time to integrate it into daily activities and processes before we come to grips with the problem.

It is evident from our study that without implementation of preservation measures for our collections, much of our valuable instructional and research resources will not survive beyond the next decade. The Condition of the Collections survey indicates that 16% of the collections (377,000 volumes) are already embrittled, 32% (753,000 volumes) are in fair condition, and 52% are in good condition. Although the percentage of our already brittle materials is lower than the national average of 25-35%, there is still cause for concern. Within ten years 32% will deteriorate, raising the total to over one million volumes unless we take immediate steps to preserve these materials and stem the tide.

The collections ranking in the worst condition by percentage of volumes in the overall collection are East Library Storage, the Doheny Stack Collection, Special Collections, the Hancock Library and the Boeckmann Collection. The collections with the best conditions, by the same comparison, are Gerontology, Doheny Reference, Social Work, Architecture and Fine Arts, and Cinema/TV.

A natural result of the distribution of library facilities throughout the campus is a range of preservation problems and solutions; some unique to each unit either due to collection, facility or staffing characteristics. There are some common difficulties which affect most sites. The location of the University in Los Angeles means that there is a high degree of air pollution present most of the time. This increases the rate of the breakdown of most paper-based library materials which are susceptible to air-born pollutants. On the other hand the mild climate means that there are not wide swings in temperature and humidity. These two generally stable environmental conditions are responsible for having prevented a greater degree of deterioration of materials than might otherwise be expected given the age and past handling of the collections.

Other problems common to all the sites include the potential threat from earthquake, fire, and water damage. In recent years, although there has never been a major crisis, both water problems and minor fire damage have threatened the collections. Inadequate binding budgets seem to be a prevalent problem, particularly for the high use collections and for those with substantial foreign publications. Overcrowded and improper shelving is another major concern in most locations, generally dealt with in a crisis-driven fashion that contributes to the deterioration of many of the collections.

Because of the University's dual mission of teaching and research and the emphasis placed nearly equally on both, the Study Team determined a need for preservation activities that would attempt to attain a balance between preventive measures and treatment. Many of the high priority recommendations will benefit both instructional and research materials.

PLANNING ASSUMPTIONS

These are the planning assumptions that have guided our recommendations.

1. Preservation planning is in the incipient stages at USC. There is a growing awareness among library staff of the problem and a desire to implement preservation practices and solutions.

2. The University has identified itself as a major research institution with plans to develop a library system of excellence that gives all necessary support to instruction and research. It can be assumed that the Library will continue to acquire, at least for the next several decades, books and serials in paper formats that will require ongoing attention. Newer formats, already being acquired, such as computer software, magnetic tapes, CD-ROM, and others, will bring different and complex preservation requirements. As our library collection ages, preservation needs and responses will attain greater significance and importance.

3. Given the number of active users and the growing circulation transactions, use of the collection will continue to take a heavy toll.

4. There is a high potential for natural disaster given our location in Southern California and the problems identified in the Library's physical facilities.

5. The magnitude of the problem calls for coordination and involvement beyond the appointment of a Preservation Librarian. It also points to the need to cooperate with other libraries, in particular with UCLA and other members of LAPNet, and to become active in national programs so that we do not duplicate the efforts of others.

6. Plans for construction of the Teaching Library present opportunities for implementing preservation measures at the design stage and making an assessment of the impact on the Central Library System's collections.

7. Environmental conditions in the library facilities will remain much the same over the next five years, unless significant funding is provided for HVAC systems.

8. Space problems will continue to exist and possibly grow, suggesting further planning to accommodate growth and to prepare appropriately for shifting materials to avoid potential damage.

9. Preservation is consistent with a proactive role as well as part of the mission of the Library and the University. It demonstrates our professionalism and commitment to improved service and access to library resources.

10. Improved coordination, communications and response from the Department of Operations and Maintenance will have a positive impact on preservation of the collections and will facilitate implementation of the Preservation Program.

11. The University has demonstrated increased concern for its library resources in the past four years, addressing many past inadequacies and present needs. It is assumed that preservation will be supported and funds found to accomplish the tasks, although for some things this will occur sooner than for others.

12. A commitment to preservation has already been made by the Central Library System in several areas: preservation planning, appointment of a Preservation Librarian, and inclusion of preservation as one of the goals in *A Library System for a University of Excellence*.

LAYING THE GROUNDWORK FOR PRESERVATION AT USC A SUMMARY OF THE LAST FIVE YEARS

Issuance of the Final Report of the Preservation Planning Program launches the preservation effort in the USC Libraries in a much more comprehensive and systematic direction than has existed in the past. It is useful however, to acknowledge that there has been some substantial preservation foundation building going on over the last five years. These efforts and achievements are briefly noted below.

Administrative Initiatives:

1. Initiation of Preservation Planning Program, sponsored by the Association of Research Libraries, Office of Management Studies (September 30, 1987)
 Study Team's *Background Paper* submitted January 25, 1988
 Task Force Reports submitted July 1, 1988
 Final Report submitted May 22, 1989
2. Designation of Don Thompson as the Library's first Preservation Librarian and his subsequent participation in the Preservation Administration Certificate Program at Columbia University (September 1988-May 1989)
3. Appointment of Victoria Steele as first Head of the separately constituted Department of Special Collections (September 1, 1988)
4. Inclusion of Preservation as Goal 5 in the Library's major planning document, *A Library System for a University of Excellence* (January 1989)

Cooperative Efforts:

1. Membership in and attendance at the Research Libraries Group Preservation Committee (1984-)
2. The RLG Preservation Committee met at USC November 4-5, 1985
3. Membership and participation in LAPNet, the Los Angeles Preservation Network (Fall 1988-)
4. Initial discussions with the Mellon Foundation regarding possible appointment of a Mellon Foundation Preservation Intern at USC (May 1989)
5. Active consideration of grant opportunities, particularly with a cooperative focus, underway (1989-)

Disaster Preparedness:

1. Attendance at Disaster Planning Workshop, Huntington Library (December 5, 1986), sponsored by the Society of California Archivists [Paul Christopher, Wayne Shoaf]

2. Dean Ritcheson appoints Disaster Response Team and an associated Task Force (April 1987)
3. Attendance at a workshop on Water Damage, Huntington Library (Spring 1988) [Don Thompson, Linda Weber]
4. Attendance at Disaster Preparedness Workshop, Loma Linda University (May 1988) [Dennis Thomison, Daniel Taylor, Ofelia Guzman]

Environmental Improvements:

1. Rehabilitation of Education Library for seismic safety reasons (Summer 1985)
2. Appointment of Library Facilities Coordinator (January 1987)
3. Air conditioning/climate control of Doheny Library (1987-1988)
4. Fumigation of designated areas in Doheny sub-basement and in the East Library (1988)
5. Creation of environmentally sensitive, climate controlled storage space for the Department of Special Collections in the East Library [Rooms 239 and 240] (1988)

Faculty/Staff Training & Awareness:

1. Series of presentations at USC by Carolyn Clark Morrow, National Preservation Specialist, Library of Congress Preservation Office (November 6, 1985)
2. Attendance at ALA Preconference on Preservation for Collection Managers, New York (June 1986) [Lynn Sipe]
3. Preservation focused exhibit in Hancock, *Ravages of Time — Ravages of Man*, prepared by Melinda Hayes (Summer 1987)
4. Public showings of the PBS video *Slow Fires* for all Library faculty and staff (February 8 & 11, 1988)
5. Tour of Huntington Library Conservation Laboratory and preservation facilities (Spring 1988) [large group from the Library]

Preservation Microfilming:

1. Presentation at USC by Patricia A. McClung, from RLG, on RLG activities in preservation microfilming (February 13, 1987)
2. USC participation in the first phase of the RLG Cooperative Preservation Project (1987) filming historic cinema titles and World War I pamphlets
3. Participation in RLG Workshop on Preservation Microfilming, Berkeley (May 1988) [Don Thompson]

**GOALS AND RECOMMENDATIONS
FOR ACTION**

GOALS AND RECOMMENDATIONS FOR ACTION

In the second phase of the Preservation Planning Program, the task forces produced more than 170 specific recommendations based on their findings. These are listed and thoroughly documented in the six separate Task Force Reports A-G. The Study Team has synthesized and combined these recommendations under five categories presented here as goals for determining the direction of preservation in the USC Central Library System. As feasible, the recommendations are prioritized and indicate responsibility for implementation, an approximate timeframe and costs or resources needed for implementation.

GOAL I

ESTABLISH PRESERVATION UNIT WITHIN COLLECTIONS DIVISION TO COORDINATE ALL PRESERVATION ACTIVITIES OF THE CENTRAL LIBRARY SYSTEM

A. CREATE PRESERVATION UNIT, HEADED BY PRESERVATION LIBRARIAN, WITHIN COLLECTIONS DIVISION, REPORTING TO AUL FOR COLLECTION DEVELOPMENT

The integration of preservation within the Collections Division adds the dimension of collection management to this division by closely relating selection and development decisions with preservation. Consideration might be given to renaming the division the Collection Development and Management Division.

Responsibility:	University Librarian
Timeframe:	Immediately
Cost:	Immediate and long-range costs; benefits for the USC Library collections

B. ESTABLISH PRESERVATION PROGRAM, COORDINATED BY PRESERVATION LIBRARIAN, CONSISTING OF: PRESERVATION UNIT; PRESERVATION LIAISON NETWORK; PRESERVATION POLICY COMMITTEE; TASK FORCE ON DISASTER ACTION PLAN; DISASTER ACTION TEAM

In order for coordination and communication (so important for the ultimate success of preservation activities) to take place, a Preservation Program is recommended consisting of the various components mentioned here, in addition to the Preservation Unit.

1. Establish and develop a Preservation Liaison Network with representation from each library unit within the USC Central Library System whose members, appointed by unit heads, will meet regularly with the Preservation Librarian to implement preservation activities in all units,

assist in disseminating information, and participate in training staff and users.

Responsibility: Preservation Librarian and Unit Heads
 Timeframe: First year and ongoing
 Cost: Staff time

2. Establish a Preservation Policy Committee to advise and assist the Preservation Librarian in determining the ongoing preservation needs of the Library System, to assist in carrying out the goals of the Preservation Program, and to draft USC's preservation policy statement and working guidelines for all units.

Responsibility: AUL for Collection Development and Preservation Librarian
 Timeframe: First year
 Cost: Staff time

3. Appoint a Task Force on Disaster Action Plan, establishing a permanent Disaster Action Team within the Library System. Guidelines for the disaster plan are in Appendix F of this report.

Responsibility: University Librarian
 Timeframe: Immediately
 Cost: Staff time, supply costs as determined by plan

C. ESTABLISH A BUDGET FOR PRESERVATION PROGRAM

Establish a budget for preservation expenses. Begin earmarking all preservation expenses in the budget to document and provide information for future funding proposals and budgeting.

Responsibility: University Librarian
 Timeframe: Immediately, with planned increments until goals are achieved
 Cost: Goal is to achieve a minimum allocation of 5% of overall Library Budget

D. ORGANIZE THE PRESERVATION UNIT IN THREE SECTIONS: COMMERCIAL BINDING SECTION; CONSERVATION LAB (IN-HOUSE MENDING & BINDING AND PAPER REPAIR) AND FILMING/TEXT PRESERVATION SECTION (MICROFILMING LAB AND COPY FOR PRESERVATION SERVICE) (See Appendix B: Organization of Preservation Unit)

1. Commercial Binding Section: Reassign all commercial binding operations to the new Preservation Unit, including all present staff. Utilize present staff in Bindery/Mending Unit to create: a) Commercial Bindery Section

(with present head); b) beginnings of the Conservation Lab and in-house binding and mending Section (with present mending assistants).

Responsibility: AUL for Collection Development, AUL for Technical Services and Preservation Librarian
Timeframe: Immediately
Cost: Staff time, training time; long-range benefits for preservation coordination

2. Conservation Lab (in-house mending and binding and paper repair): Plan a phased program for expansion of the present mending and repair operations into a future full-scale materials treatment program which will evolve into the Conservation Laboratory. To accomplish this, the mending and repair staff will be separated from Commercial Binding Preparations and form the foundation for the Conservation Section.

Responsibility: AUL for Collection Development and Preservation Librarian
Timeframe: Second year
Cost: Staff time; long-range benefits toward development of foundation of conservation section

3. Filming/Text Preservation Section: Develop a phased plan for the expansion of Micrographics into a full-scale Filming/Copy for Text Preservation operation by transferring the present two staff members in microfilming/copying for text reformatting and replacement functions from their present location in the Public Services Division to the Collections Division. Public service functions, overseeing the microform collection and public service copying, will remain in the Public Service Division.

Responsibility: AUL for Collection Development, AUL for Public Services and Preservation Librarian
Timeframe: First year
Cost: Staff time; long-range benefits for a brittle-books program

E. HIRE QUALIFIED KEY STAFF TO IMPLEMENT PRESERVATION PROGRAM

The proposed minimal staffing required includes a total of thirteen full-time staff of which seven new positions are recommended, in addition to reassignment of present staff as recommended in Appendix B-2, Organization Chart for the Preservation Unit. See also Appendix C for recommended job requirements and qualifications.

1. First year (1989-90): Hire clerk/secretary and Head Conservator (Head, Conservation Lab) to begin assisting the Preservation Librarian in developing and implementing the Preservation Program, to train the

mending/repair staff and other staff in basic preservation techniques. Mending/repair assistants will report to the Head Conservator.

2. Second year (1990-91): Hire Book Conservator (supervisor of the mending/repair assistants, under Head Conservator) and hire two Binding Team Assistants who will report to the Head, Commercial Binding Section. The Commercial Binding Team assistants will rotate from unit to unit preparing the materials and boxing them as required by the commercial bindery.

The benefits include: a) elimination of redundancy and a reduction in handling of materials, b) provision of standard handling treatment by specially trained binding assistants, c) improvement in relations with commercial binder and, therefore, of binding results, d) freeing up of staff time in other units for implementing other preservation activities proposed in this report.

3. Third year (1991-92): Hire Head, Preservation Replacement to begin developing and implementing a brittle-books program (based on collection development priorities). This position will supervise the two assistants transferred from Micrographics.
4. Fourth year (1992-93): Hire Paper Conservator (under Head Conservator) to assist in establishing a full-service physical treatments laboratory.
5. Fifth year (1993-94): Establish an internship program once the framework for the Preservation Program is established, staff and user education and training has commenced, and priorities for projects are set. The interns can provide assistance in several areas of the Preservation Unit, particularly in the Conservation Lab and with the brittle-books program.

Responsibility: University Librarian, AUL for Collection Development and Preservation Librarian (involve staff in Preservation Unit as appropriate)
Timeframe: As specified above
Cost: To be determined

F. INCORPORATE PRESERVATION RESPONSIBILITIES INTO JOB DESCRIPTIONS OF ALL LIBRARY STAFF

Preservation is a library-wide responsibility and should be acknowledged by incorporating it appropriately into job descriptions. Although some individuals will be more involved in handling and treatment of materials, ultimately the responsibility for the safety and preservation of the collections lies with each library staff member.

1. Provide specialized assignments and training for staff in certain key areas where library materials are frequently handled: mail room, mending and binding, stack supervisors, all Technical Service Units, Access Services,

and in all units responsible for special collections such as Special Collections, Boeckmann Center, Hancock Library, etc.

Responsibility: AUL for Administrative Services, other AULs as appropriate and Preservation Librarian
Timeframe: First year and ongoing
Cost: Staff time, training materials

2. Plan a phased program for incorporating conservation measures into the Cataloging Unit's Preparations Section to tie in closely with the Preservation Unit's activities. (The Study Team does not recommend incorporation of this Preparations Section into the Preservation Unit at this time because of workflow complications posed, however it should remain a future option in order to eliminate duplication of preparation functions and provide greater flexibility in staffing for the Preservation Unit.) This recommendation includes hiring a conservation consultant on a temporary basis, until a full-time conservator is hired, to begin training mending and binding staff in the Preservation Unit and staff in the Preparations Section of Cataloging; and to evaluate in-house practices and recommend conservation-safe supplies and equipment for mending, in-house binding and preparations.

Responsibility: AUL for Technical Services and Preservation Librarian
Timeframe: First year
Cost: Consultant costs to be determined, staff time, and supply costs

3. Incorporate preservation into job descriptions of library staff who do not frequently handle library materials as a part of their duties. A statement such as the following is recommended: *Demonstrate awareness of preservation as it relates to the Central Library System and actively participate in preservation programs, as required.*

Responsibility: AUL for Administrative Services and Preservation Librarian
Timeframe: Immediately
Cost: Training implications and costs associated with updating job descriptions

G. ESTABLISH UNIVERSITY PRESERVATION ADVISORY COMMITTEE, REPORTING TO THE UNIVERSITY LIBRARIAN

Create a university-wide preservation advisory committee, with representation by faculty, staff and students from the university community. The Preservation Librarian should serve on this committee and it should report to the University Librarian. Members should provide outside input to preservation problems facing the Library System, assist in disseminating information to the

University community, and raise the consciousness of university groups outside the Library System.

Responsibility: University Librarian
Timeframe: Second year
Cost: Minor costs in relation to benefits achieved by broadening awareness of preservation concerns

GOAL II

RECOMMENDATIONS TO PRESERVE, PROTECT AND EXTEND THE LIFE OF THE USC LIBRARY COLLECTIONS

The USC library collections, containing a wealth of recorded knowledge, also represent a major capital investment and constitute essential tools for supporting the academic mission of the University. The recommendations that follow are based on sound preservation practice and take into consideration reasonable expectations for a research library. They include methods for prevention of damage and treatment for materials in poor condition. All recommendations should be carefully guided by a library-wide collection development policy, since a decision to treat one book or collection is simultaneously a decision not to treat another. Even though priority should be given to materials with long-term value for our libraries, all materials will benefit.

A. CREATE LIBRARY-WIDE COLLECTION DEVELOPMENT POLICIES TO GUIDE PRESERVATION DECISIONS

Although some ad hoc and item-by-item preservation decisions are necessary, for the most part the preservation program should be guided by the needs of the collection as identified by our Condition of the Collections Survey and based on updated collection development policy statements with preservation components. These statements should be revised periodically to address changing needs and directions of the collection as well as new programmatic needs and research trends at USC. An up-to-date and well formulated collection policy statement with appropriate preservation statements will assist us in identifying priorities for preservation.

1. Work toward completion of a library-wide collection development policy statement for all subject areas collected at USC. Draft statements for subjects not presently covered, update older policies, and incorporate preservation considerations.
2. Develop library-wide priorities and criteria for preservation and salvaging our collections in the event of a disaster, based on our collection development policies.
3. Develop and implement policies and procedures to identify materials in poor condition (fragile or brittle) and select among alternatives for protecting these items, such as temporary measures for limiting them to library-use only or tagging to alert patrons to handle with care, until appropriate preservation decisions and actions are made.
4. Carry out a survey of the photographic collections in the Central Library System to determine their condition and preservation needs. During the site visits this material was seen as particularly vulnerable and in need of

attention because of the lack of environmental controls and adequate storage.

Responsibility: AUL for Collection Development and Preservation Librarian
(involve Selectors appropriately)
Timeframe: Second year – establish priorities; Third year – complete policies,
implement and survey photographs
Cost: Staff time, possible supply costs for tagging fragile items

B. PROVIDE IMPROVED SAFETY AND DISASTER PREPAREDNESS FOR THE COLLECTIONS

As our Task Force study on Disaster Control has shown, all of the USC library collections are potentially at risk from disaster. Certain areas have a greater measure of protection, but generally the collections are inadequately protected from risks of fire, mutilation and theft. Recent experiences at the Los Angeles Public Library indicate a need for greater security over stack access, particularly in the Doheny Memorial Library building, but in other facilities as well. Needed are a coordinated plan of response to disasters of various types that are of greatest threat, an insurance program for the collections, and staff training and awareness. (Recommendations regarding safety of the buildings, facilities and equipment are under Goal III.)

1. Draft a Disaster Action Plan which includes a comprehensive fire detection/suppression/prevention program for the collections. Copies should be distributed to all units and made accessible to all staff. All library staff should become familiar with the plan and know how to respond, if necessary.
2. An insurance program for the collections should be implemented with coverage for significant or catastrophic loss. It should cover water and fire damage, theft and mutilation. As part of the program, a regular and ongoing inventory of the collections for rare materials in open stack areas should be undertaken by assigned staff in each unit. These materials should be moved to secure areas such as Special Collections or a closed stack area. The insurance coverage should be reviewed and updated periodically as the value of certain materials and collections increase.

Responsibility: AUL for Collection Development, Preservation Librarian and Disaster Action Task Force
Timeframe: First year – draft Disaster plan; Second year – implement disaster plan; Fourth to Fifth year – inventory and insurance coverage
Cost: Staff time for plan, considerable staff time to inventory and high insurance coverage costs; benefits: facilitate recovery and decrease costs in the event of a disaster

3. Consider a more efficient allocation and arrangement of personnel and theft detection systems at entrance/exit points throughout the library system, particularly the Doheny Memorial Library, to reduce unauthorized access and improve security and safety for the collections. The Los Angeles Public Library fire was caused by unauthorized access to the collections.
4. To improve security in libraries sharing space with departments outside the library system, recommend alternatives and steps toward discontinuing this practice. Priorities for action include Von KleinSmid Library and Hoose Library.

Responsibility: AUL for Public Services and Preservation Librarian (involve Unit Heads and O & M appropriately)
Timeframe: Second to Fourth year (give priority to Doheny Library entrance and exit points)
Cost: To be determined

C. ESTABLISH BRITTLE-BOOK PRESERVATION PROGRAM

Brittle books, as noted in our survey, are one of the problems of greatest magnitude facing the USC Library System. Chemical deterioration, which causes books to become brittle, eventually affects the entire collection. USC must begin to develop and implement a brittle-books program to address the 377,000 volumes that are already too brittle to withstand use and the 753,000 volumes perched on the edge of embrittlement within ten years. Although it is unreasonable to expect that all items will be saved, attempts should be made to protect and preserve by various methods all worthy unique materials and those of highest priority to USC. Remain open to new technological developments, particularly electronic storage of information, that would expand our preservation options.

1. Establish policies and carry out a program for the selective application of various alternatives: microfilming, use of protective containers, preservation photocopying, deacidification for the brittle/acidic materials deserving of these treatments.
2. Begin an ongoing program to inventory and locate in all collections the unique and irreplaceable among the brittle items and those that require, or will soon require, preservation treatment. Identify those most deserving of immediate treatment. Consider setting priorities on those collections already identified in the Physical Condition of the Collections survey as constituting a high percentage of brittle materials.
3. As part of their normal duties, selectors and other assigned staff should be trained and assigned to identify brittle materials, to apply preservation options, and to forward brittle materials to the Preservation Unit for treatment.

4. Consider alternatives to in-house replacement methods (i.e., in-house microfilming and photocopying). Suggested alternatives include the purchase of replacement copies, reprints, or microform, when available. (Caution: Store silver halide microforms separately from other types to prevent oxidation.)

Responsibility: AUL for Collection Development and Preservation Librarian
(involve Selectors and Preservation Liaison Network appropriately)
Timeframe: Second to Fifth year (phase in program after collection development policies are completed)
Cost: Staff time, training, additional supply and book budget expenses to be determined

5. Explore possibility of contracting out the microfilming of USC theses and dissertations in order to free up our in-house staff and equipment for preservation microfilming.

Responsibility: AUL for Public Services and AUL for Collection Development
Timeframe: Second year
Cost: Contract costs to be determined

D. IMPROVE METHODS OF HANDLING, SHIFTING AND TRANSPORTING MATERIALS

All library materials should be handled with care during receiving, cataloging, processing, reshelving, shifting and storing. There are many opportunities in all units of the library to practice preventive measures, eliminate wear and tear on materials by staff, thus extending the life of the materials and demonstrating our commitment to preservation by setting good examples for the users. Our background study documents many shifts that the collections have undergone over the years. In recent years this has continued. The future portends continuing shifts, given the construction of the Teaching Library and growth of the collections. The following recommendations are based on the accepted principle of in-house handling that "less is better."

1. Eliminate the use of paperclips, staples, tape, post-it notes and rubberbands on all library materials. Investigate alternative methods of attachments and raise awareness about the irreversible damage that these items cause, especially for unbound, fragile, rare and expensive items.

Responsibility: Preservation Librarian and all Unit Heads
Timeframe: Immediately
Cost: Staff time, purchase of alternative supplies

2. Develop and implement cataloging guidelines that take preservation concerns and priorities into consideration. Catalog rare, expensive or special materials expeditiously or use secure methods for storing and

protecting all materials while in the processing stream. All in-process materials should be handled and shelved according to accepted preservation practices outlined in this report.

Responsibility: AUL for Technical Services and Preservation Librarian
Timeframe: First year
Cost: Staff time

3. Empty book drops more regularly and consider closing book drops when libraries are open to encourage patrons to return materials at circulation points. Increase awareness of staff about the need to observe the condition of returned materials and, if found in poor condition, to bring to the attention of the preservation liaison, or the Preservation Unit.
4. Provide plastic bags at circulation desks for circulating materials, especially during inclement weather. These will help protect materials and can be designed to publicize preservation and raise consciousness levels of patrons about the need to handle library materials with care.

Responsibility: AUL for Public Service, Public Service Unit Heads and Preservation Librarian
Timeframe: First year
Cost: Staff time, cost for plastic bags to be determined

5. Maintain a public service reading area in East Library to decrease paging, and therefore handling and transporting, of certain materials, such as non-circulating archival, photographic and fragile items stored in this facility.

Responsibility: AUL for Collection Development and Head, Access Services
Timeframe: Third year, full implementation
Cost: Staffing for the reading area; may result in savings by decreased paging and transporting of materials from East Library

6. It is critical to plan with adequate lead time when shifting or moving large portions of the collection so that materials can be boxed, moved and reshelfed carefully and within a reasonable timeframe. Storage of materials in acidic boxes for extended periods of time should be discouraged and avoided as another significant cause of rapid deterioration and mold formation. The Study Team and task forces, during site visits, noted a considerable number of such materials, particularly in the East Library, and in other areas, awaiting transfer to storage or processing. Continual shifting might be eliminated by addressing the issue of collection growth and expansion and developing a

long-range plan to accommodate this, reducing some of the shifting in the future.

Responsibility: AUL for Collection Development and AUL for Public Service
 Timeframe: Second to Third year, but before occupying Teaching Library
 Cost: Planning time, other costs to be determined

7. Explore preservation-safe packaging alternatives which minimize damage to books sent between locations within the library system, through interlibrary loans, or via campus bus to other nearby institutions. In-transit practices and cooperative loan agreements are functions of our service orientation and, therefore, facts of life that must be coped with to prolong the life of our circulating library materials. Damage can be prevented by following Research Libraries Group guidelines and Rare Book and Manuscript Standards for packaging materials, especially rare and fragile items. Guidelines in the *RLG Shared Resources Manual* state: "Preferred packaging consists of wrapping the volume in bubble wrap and placing it in a sturdy carton for shipping." Eliminate the use of styrofoam peanuts, plain manila envelopes, acidic newspapers and "jiffy"-type bags, all found to be unsafe for library materials.
8. Investigate the possibility of developing new reshelving procedures for Doheny stacks that would minimize transporting and handling of materials. Present procedures require all materials to be brought from all other levels to the Doheny Circulation Unit for resorting, then transporting the materials back to their levels. A study of call number distribution might be one approach, combined with practical alternative solutions, e.g. installing copy machines on each stack level and reshelving level by level.

Responsibility: AUL for Public Services, Preservation Librarian and Head, Access Services
 Timeframe: Second year
 Cost: Staff time, supply costs to be determined; possible decrease in workload and handling of materials with new procedures for reshelving

E. PROVIDE BINDINGS AND PROTECTIVE COVERINGS FOR ALL MATERIALS

It has been proven that the shelf life of bound or protectively covered materials, even under adverse environmental conditions, is longer than those unbound or uncovered. Properly bound materials deteriorate less rapidly than unbound materials. Proper bindings or other coverings also extend the life of circulating materials. A wide variety of preservation-safe binding and encasing options are now available and should be investigated for use. During the preservation self-study it was brought to our attention by many library staff that a large percentage of the USC collection requires binding and that staff are

unfamiliar with binding options. Our library's binding budget is inadequate to bind or treat all materials. Many unbound monographs, serials and pamphlets, particularly foreign materials, are sent from cataloging directly to stack collections. After one or two circulations, the materials are often in need of repair. The following recommendations address these concerns.

1. Develop a coordinated library-wide binding policy with appropriate binding volume allowances and allocations for each library unit. Take into consideration the research value of the materials, the special needs of units with considerable numbers of unbound periodicals and/or with significant numbers of unbound foreign publications. This requires a survey of binding needs.
2. Provide, as standard practice, a wider variety of options for binding and covering materials: commercial binding, in-house binding, protective containers such as phase boxes, cases, wrappers and mylar encapsulation, sew-through-fold binding, and acid-free sleeves for the photograph and microfiche collections. Train selectors and other staff so that appropriate binding types can be assigned early in the acquisition/cataloging process for monographs and other single items. Serials and other binding decisions should be recorded and maintained by the library bindery staff in a centralized file, pursuant to automation of serials check-in and the acquisition of an automated binding module.

Responsibility: AUL for Collection Development and Preservation Librarian
Timeframe: First year – survey of needs and planning; Second year – develop policy; Third year – implement binding options; Second to Fifth year – annual increases in binding budget
Cost: Time to survey, annual binding budget increases, supply costs

3. Increase the commercial binding budget to 10% of the acquisitions budget, the level recommended by the Association of Research Libraries, over the next five years to address past inadequacies and current needs identified in the above mentioned binding-needs survey.

Responsibility: University Librarian
Timeframe: First to Fifth year and ongoing
Cost: \$300,000 total annual cost with yearly adjustments (current annual binding budget is approximately \$120,000)

4. Develop an acquisitions policy to include preference of hard-bound materials over paper-bound materials, alkaline materials over acidic materials, when available, and unbound material in sound condition which might be bound. Inform vendors from whom USC purchases materials

that acquired materials will be reviewed for condition upon receipt and rejected if our standards are not met.

Responsibility: AUL for Collection Development and AUL for Technical Services
(involve appropriate Unit Heads)
Timeframe: Immediately
Cost: Staff time, anticipate additional book budget expenditures; but also savings in future treatment costs

F. IMPROVE SHELVING METHODS AND TECHNIQUES

Inappropriate shelving methods, often utilized in order to cope with inadequate space and a burgeoning collection, a lack of training and knowledge of the importance of careful handling, or indifference or neglect, eventually lead to damage and destruction of library resources. Proper shelving methods and techniques, often relatively simple and inexpensive to implement, improve patron access and extend the life of books and other materials.

1. Eliminate overcrowding on shelves to prevent damage in removing books and in reshelving. Carry out weeding projects in all stack areas, as needed, particularly the Doheny, Von KleinSmid, and Science and Engineering stacks. Store only those materials needed in the future. Deselect unwanted materials.
2. Remove materials or protect them from all sources of direct heat and light, for example, on top shelves near ceiling lights in Doheny stacks and Science and Engineering stacks, near windows in Government Documents (microfiche) and above heat radiators in the Hoose Library of Philosophy.
3. Eliminate fore-edge shelving which, over time, separates the text block from the spine. Books too large to shelve upright should be shelved on the spine (which may require writing the call number on the text block) or in another location that will permit them to be shelved properly.
4. Shelf folios and other oversize books horizontally on shelving that provides adequate support to prevent warping and other damage. Limit the number of folios shelved on top of each other (three is the recommended limit) to allow ease of access by patrons and staff. Locate folios near tables or other flat surfaces to prevent further damage when they are consulted by users. Ensure that folios and oversize books are properly identified in the cataloging process to assist in carrying out this measure.

Responsibility: AUL for Public Services, AUL for Collection Development, Public Service Unit Heads (include Selectors appropriately in any

	selection/deselection decisions and AUL for Technical Services in cataloging issues)
Timeframe:	First year – eliminate fore-edge shelving; Second year – reshelve folios; Third to Fourth years – complete shelving recommendations
Cost:	Staff time, possible capital expenditures, e.g. for shelving, curtains, etc. to be determined by survey of units' needs

G. THOROUGHLY CLEAN COLLECTIONS TO SLOW DETERIORATION AND PREVENT VERMIN INFESTATION

Regular cleaning of books and other library materials eliminates or reduces abrasive dirt and dust particles, harmful airborne pollutants, and discourages mold formation and vermin infestations which contribute to paper deterioration or destruction. Construction and renovation, in recent years, within the Doheny Library and East Library has left a residue of dirt and dust throughout stack and work areas and in Technical Services that if neglected will abrade materials and promote increased deterioration. Once a thorough cleaning has been accomplished, effective air filters on the libraries' ventilation systems, similar to the type installed in the Fine Arts Press, will serve as an additional protection. The recommendations that follow are based on these observations.

1. Include cleaning of the collections as a regular ongoing maintenance activity of all units. To ensure that it is accomplished, designate staff to carry out these tasks. Integrate the tasks into appropriate job descriptions in all units.
2. Investigate the need for a first-time thorough cleaning of the entire collection over a five year period. Investigate available alternatives for accomplishing this, particularly in the event of a disaster.
3. Inspect present collections and new unprocessed collections for vermin. Fumigate, as necessary, materials infested with vermin and mold to deter widespread destruction. Review our current methods of fumigation and consider alternatives that are safe for both materials and people.

Responsibility:	AUL for Collection Development, AUL for Public Services and Preservation Librarian
Timeframe:	Immediately to Third year (in phases)
Cost:	Staff time, equipment and supplies, fumigation or eradication costs

4. Develop acquisitions/receiving procedures for newly acquired materials that include inspection of incoming materials for dirt, mold, and vermin, with guidelines and procedures for responding.

Responsibility:	AUL for Technical Services, AUL for Collection Development and Preservation Librarian
Timeframe:	Second year
Cost:	Staff time

H. ACQUIRE BACK-UP COPIES AND DUPLICATES OF CERTAIN BOOK AND NON-BOOK MATERIALS WITH LONG-TERM RESEARCH VALUE OR HIGH USE

In all collections, heavy use of certain materials, especially those with future research value, require the purchase of back-up copies (i.e., duplicate copies or microform copies) or the creation of copies, ensuring their accessibility to future scholars and students. Forthcoming policies related to non-book materials will soon be available from the Non-Book Materials Task Force, a subcommittee of the Cataloging Policy Committee. The recently established Collection Development Committee for the Teaching Library should also consider the impact of the new library on the need for duplication as they carry out their charge.

1. Purchase or create back-up copies and or archival copies for selected non-book materials (videos, films, sound recordings, and computer software). Follow existing copyright laws and University guidelines.
2. Establish a high-use fund for intentional duplication of heavily used items. Criteria should include demonstrated need for multiple copies or copies in multiple locations (such as the Teaching Library and another library or collection) long-term value to USC's collection combined with the difficulty of replacement in the future. Develop acquisition and selection policies and procedures for use of the fund by all selectors.
3. Establish a replacement fund for purchase of replacement copies for missing, mutilated, damaged or deteriorated titles, when available in print or through the out-of-print market.
4. Store microform masters of preserved materials in secure offsite storage. Any microfilm masters of material filmed under the Research Libraries Group preservation program should be stored in RLG facilities as designated.

Responsibility: AUL for Collection Development, Preservation Librarian (involve Selectors appropriately)

Timeframe: First year – microform storage and criteria for establishing new funds; Second to Third year – complete recommendations

Cost: To be determined

5. Support the practice of providing for the protection of the Library's machine-readable databases by continuing to create back-up copies and storing these in a secure offsite location. If by 1995 an online shelflist has not been created, seriously investigate the possibility of microfilming the Library's shelflist and storing it offsite as well.

Responsibility: University Librarian and appropriate AULs

Timeframe: Fifth year

Cost: To be determined

GOAL III

**PROVIDE PROPER STORAGE ENVIRONMENTS IN LIBRARY BUILDINGS
AND FACILITIES AND EQUIPMENT THAT CONTRIBUTE TO
EXTENDING THE LIFE OF ALL LIBRARY MATERIALS**

Proper storage environments are, in the long run, more economical measures for reducing deterioration per volume than conservation treatment. The life expectancy of paper-based materials, not yet embrittled, is lengthened significantly by improving the environment (temperature, humidity, light, air quality, and shelving) in which they are stored. It has been shown that the rate of replacement is also reduced. Non-book materials also benefit from similar climate control and appropriate storage. Embrittled materials too deteriorated to profit from deacidification benefit as well. The recommendations recognize the advances made already and suggest ways to build on these over the next five years.

A. MAINTAIN ROUND-THE-CLOCK TEMPERATURE AND HUMIDITY-CONTROLLED ENVIRONMENTS AND ESTABLISH MONITORING PROGRAM

1. Establish an ongoing environmental monitoring program to continually monitor the physical environments (temperature and humidity) of the collections, working closely with Operations and Maintenance staff (O & M), to ensure that all library collections under environmental controls are within the recommended range of temperature and humidity. Monitor temperature and relative humidity on a bi-weekly basis at various times of the day, in all areas where collections are stored (whether under climate control or not) to identify problems quickly and make adjustments as required.

Responsibility: Preservation Librarian and Facilities Coordinator
Timeframe: First year
Cost: Approximately \$500 to \$1,000 for equipment and staff time

2. The ideal temperature is $65^{\circ}\text{F} \pm 5^{\circ}$ for library collections. Because reader stations are among the stacks in most collection locations, a compromise must be effected between comfort for readers and the ideal storage temperature for paper-based library materials. Therefore, we recommend the following three temperature levels with minimal fluctuations:
a) $63^{\circ}\text{--}67^{\circ}\text{F}$ for storage areas (no reader stations) such as East Library storage and Microfilm storage; b) $66^{\circ}\text{--}70^{\circ}\text{F}$ for Special Collections and

Boeckmann Center; c) and 68°-72°F for stack areas with reader stations, such as Doheny stacks, College, Science and Engineering, Business, etc.

Responsibility: Preservation Librarian, Facilities Coordinator and Director of O & M
 Timeframe: Third to Fifth year
 Cost: To be determined

3. The ideal relative humidity is 50%±5%. Having a daily variant of no more than ±3% is recommended for all areas of the library, stacks and reader areas included. After the monitoring and documenting program has been established, attempt to minimize fluctuations with portable humidifiers/dehumidifiers until HVAC systems are in place.

Responsibility: Preservation Librarian, Facilities Coordinator and Director of O & M
 Timeframe: Third to Fifth year
 Cost: To be determined

4. Encourage staff to keep all windows and outside doors closed in temperature-controlled collections to avoid overriding the environmental controls. Open windows and exits also pose security problems. During the study, problem areas noted include windows in the mailroom, the south and east doors of Doheny Library, and inside the patio.

Responsibility: Preservation Librarian, Unit Heads and Facilities Coordinator
 Timeframe: Immediately
 Cost: Staff time and possible costs in refitting locks; savings in energy costs

5. Provide, as soon as feasible, effective independent environmental controls for all library locations which are integrated with their buildings' systems so that recommended temperature and humidity levels can be achieved. These locations include: Architecture and Fine Arts, Hoose, Social Work, and Hancock. Base priorities on the results of the Physical Condition of the Collections survey.
6. Develop a long-range plan to provide HVAC systems for (in priority order) 1) Hoose Library; 2) East Library storage areas; 3) Hancock Library; and implement in phases over the next five to ten years. Although this is urgently needed, the study team recognizes the impracticality of recommending that HVAC systems be installed immediately in all library locations. This is the ideal situation and ultimately the most effective solution to preserving the collections. The cost of implementation at this time leads us to suggest this alternative. If monies become available, we

urge that temperature and humidity control be provided for all collections lacking such preventive protection.

Responsibility: University Librarian
 Timeframe: Third to Fifth year – independent controls; Fifth to Tenth year – HVAC systems installed
 Cost: High, capital improvements which may require special additional funding

7. Seek various interim alternatives for environmentally protecting the rare and unique materials in library facilities not currently under environmental controls, until such time as HVAC systems are installed. Any measures that will assist in extending the life of these materials will greatly reduce the need for some future conservation treatment. Example of such alternatives are included throughout this report. To reiterate briefly, a few of the most important: keep air circulating, shelf properly, provide control of relative humidity by portable humidifiers/dehumidifiers to avoid dessication of paper and bindings, reduce or eliminate exposure to light and heat from light, and reduce contact with foreign materials or particles. The most intrinsically valuable items, however, should be moved to one of the climate-controlled libraries immediately, if the five to ten year delay signifies their complete deterioration in the interim.

Responsibility: AUL for Collection Development, AUL for Public Services, Preservation Librarian and Unit Heads
 Timeframe: First year and until HVAC systems installed
 Cost: Staff time and some new equipment costs

B. INSTITUTE FIRE PREVENTION/DETECTION/SUPPRESSION SYSTEMS AND OTHER DISASTER-PREVENTION METHODS

Adequate prevention, detection and suppression systems are recommended for each building where library materials are stored. The preservation study has identified, reported and described these locations in several of the interim documents—background report, condition of collection, and environmental task force reports. Some steps for achieving this objective include:

1. Request a fire prevention audit from our local fire department for all library locations.

Responsibility: Preservation Librarian and Task Force on Disaster Action Plan
 Timeframe: First year
 Cost: To be determined

2. Evaluate the existing fire detection/suppression systems and equipment in place in the various libraries for their effectiveness. Work closely with the

University safety officer in developing a phased program to install and upgrade the systems in all library buildings.

Responsibility: Preservation Librarian, Facilities Coordinator and University Safety Officer
 Timeframe: First year
 Cost: Staff time for evaluation, installation and maintenance costs to be determined

3. Survey electrical outlets to insure they are not overloaded. Install additional upgraded ones as necessary, to avoid fire hazards. Inform staff about potential hazards of overloaded outlets and encourage staff to turn off all appliances and equipment at night, when feasible, and during closings, to prevent electrical fires.

Responsibility: Preservation Librarian, Facilities Coordinator and Director of O & M
 Timeframe: Second year – survey; Third to Fifth year – installation
 Cost: Staff time (survey and training), rewiring costs

4. Consider installation of Halon systems in areas with valuable materials that might be damaged by water in the event of fire: Special Collections, Schoenberg Institute Archive, and Hancock and Hoose libraries' rare collections.

Responsibility: AUL for Collection Development and Preservation Librarian (involve Unit Heads appropriately)
 Timeframe: Fourth to Fifth year
 Cost: High, if installation is carried out

5. Provide emergency and disaster response kits for all library units. Designate supplies in the disaster response plan similar to those recommended by the Task Force E/F: Preservation Resources/Staff and Users.

Responsibility: Preservation Librarian
 Timeframe: Second year
 Cost: Approximately \$500 for each kit (suggest 30 kits to begin)

C. PROVIDE WATER-DAMAGE AND FLOOD CONTROL IN LIBRARY FACILITIES

Water damage is ubiquitous regardless of the type of disaster: fire, flood, or earthquake. It reduces paper to pulp and, if salvageable, necessitates rebinding. Photographs are rarely salvageable when they are water damaged. If we take certain precautions we may be able to reduce recovery costs and salvage time in the event of a crisis. The study identified water damage as one of the ongoing problems in the USC Library System. Our recommendations take these facts into consideration.

1. Develop a list of potential flood areas and water problem areas based on previous experience and on observation of potential new areas identified in site visits by the Study Team and the task forces and their surveys, particularly the Task Force on Disaster Control.

Responsibility: Facilities Coordinator
Timeframe: First year
Cost: Staff time, possible future expenditures for preventive measures

2. Work closely with O & M staff to reduce the possibility of recurrences of flooding and water damage in the areas identified in the above recommendation.

Responsibility: Facilities Coordinator and Director of O & M
Timeframe: First year and ongoing
Cost: Staff time

3. Take precautions to shield materials near exposed water pipes in the Doheny Library. Move the more vulnerable materials away from potential problem areas, for example the microfilm near pipes in the microfilm storage area.

Responsibility: Facilities Coordinator and Unit Heads
Timeframe: Third year
Cost: Staff time and facilities improvement costs

4. Identify a deep freeze facility on or near campus to be used in the event of a major disaster that causes water damage to significant numbers of books. This will enable us to respond quickly to freeze wet materials until they can be properly treated.

Responsibility: Preservation Librarian
Timeframe: Immediately
Cost: Staff time

D. CARRY OUT PRESERVATION PLANNING AND PRESERVATION IMPACT STUDY OF NEW TEACHING LIBRARY ON CENTRAL LIBRARY SYSTEM

The proposed Teaching Library presents an opportunity to implement sound preservation practices at the design stage for both the new facility and on the Library system's collections.

The new Preservation Librarian should serve as a principal preservation resource person for the planning of the Teaching Library and gather and provide preservation information on features to incorporate into the plans for the new building with special attention to concerns addressed in this Final Report. Highest priorities are climate control, adequate shelving and storage for book

and non-book materials, exhibit cases, and the subsequent shifting of materials from other libraries to the newly constructed facility.

The above information should take the form of a preservation impact study which would evaluate the effects of the Teaching Library on the Central Library System including such things as anticipated effects on present collection (shifting and use of space left after shifting), activities that need to be planned in advance to protect materials, types of materials to be housed in the new Teaching Library, proper climate controls, proper storage cabinets, shelving, bookends, and other preservation needs.

Responsibility: AUL for Collection Development and Preservation Librarian
Timeframe: First year
Cost: Staff time

E. ACQUIRE SPECIAL PRESERVATION-QUALITY EQUIPMENT AND SUPPLIES

Consistent findings of all participants in the preservation study demonstrate the need for replacement or first time purchase of special preservation quality equipment and supplies to fully implement many of the recommendations in USC's preservation program. The most obvious ones are listed here and are library-wide needs. Over time, special unique needs should be identified and addressed by the Preservation Librarian.

1. Acquire adequate and proper book trucks and phase out and eliminate older unsafe book trucks. A survey of all units needs to be carried out to identify the quantity and types required. Within five years, all unsound and inadequate trucks should be replaced, as necessary, and new trucks should be in place.
2. Purchase appropriate containers for protecting library materials being transported within the Central Library System or for interlibrary loan to other libraries. Recommended characteristics to protect materials include cushioned, waterproof and covered containers for use on campus. RLG guidelines should be followed for transporting materials through interlibrary loans or via campus bus.
3. Vehicles designated for the movement of library materials, for example from the East Library to other library locations, should be properly equipped for protecting materials (i.e., covered and padded). Materials should not be moved from environmentally controlled areas on extremely hot or humid days. The drastic temperature and/or humidity fluctuations would place stress on materials.
4. Purchase at least one hand-held vacuum cleaner with hose attachments for each unit for use by staff as part of a basic cleaning kit for the proper elimination of damaging dust and dirt in stacks and on materials. Larger units, such as Doheny stacks, Von KleinSmid, and Science and Engineering will require more than one vacuum cleaner.

5. Purchase protective bookends with preservation in mind. Take into consideration the number, approximate size of material to support, strength, and design.
6. Purchase an adequate number of kick stools and ladders for stack areas to facilitate implementation of recommended improved handling and shelving/reshelving techniques. A survey is required to identify library-wide needs in the next five years. An immediate need is for at least one ladder on each level of East Library to facilitate access to material on high shelving.
7. Acquire special preservation-quality supplies for use in preparations and mending. Purchase bulk quantities and establish a budget line for future needs based on per-unit cost. Eliminate all damaging supplies or use them for purposes other than treatment of library materials.
8. Purchase equipment for monitoring temperature, humidity and light in appropriate numbers to carry out a monitoring program in all units of the Library system as recommended under this goal. We recommend purchase of additional sling psychrometers or hygrothermographs and hygrometers.

Responsibility: Preservation Librarian (involve all Unit Heads appropriately)

Timeframe: First to Fifth year (in phases)

Cost: Exact costs depend on quantity, bulk purchases suggested

F. PROTECT AGAINST ULTRAVIOLET RAYS AND LIGHT-INDUCED HEAT

Ultraviolet rays emanating from light fixtures and the sun cause irreversible damage to all library materials. In addition, light-induced heat further hastens the deterioration of paper-based materials. Although none of the task forces were charged with evaluation of the light levels, it was observed by the task forces and the Study Team during our various site visits, that improvements in control over light in several areas would further enhance protection of materials especially as an alternative in areas lacking temperature and humidity controls.

1. Install special UV (ultraviolet) filters on all appropriate light fixtures over the next five years, starting with the collections determined by the survey to be in poorest condition.
2. Remove materials, if at all possible, from exposure to sunlight entering windows, or install/repair blinds or special curtains, and/or coat windows with UV filter material, particularly in the Periodicals Reading Room, the Business Library, Hoose, Hancock, and the Science and Engineering Library.
3. Insure that lights in stack areas are turned off when stacks are not being used. Installation of independent light switches and timers on light switches facilitate implementation of these protective measures. This is particularly important in areas lacking temperature controls, such as East

Library Storage, since light also produces heat that increases the rate of deterioration.

4. Monitor light levels in all library locations on a semiannual basis and make adjustments, including the replacement of worn out UV filters, as needed. This will require special light monitoring equipment not yet owned by the library.

Responsibility: Preservation Librarian and Facilities Coordinator (involve Unit Heads appropriately)
Timeframe: First to Fifth year – purchase UV filters (in phases); ongoing monitoring required and training to turn off lights
Cost: \$1,000/year for UV filters, staff time and training time, \$500 for basic monitoring equipment, other equipment and supply costs to be determined; savings anticipated in electricity if lights are turned off in certain areas

G. RENOVATION FOR PRESERVATION UNIT FACILITIES IN EAST LIBRARY

In order to provide the infrastructure for carrying out preservation activities, coordination and treatment of material, the staff of the Preservation Unit require properly equipped facilities and office space. This includes a conservation laboratory and a filming/text reformatting laboratory. A commercial bindery preparation facility is already located in the East Library. Basic facilities should include a vault to store valuable materials while they are in process, basic laboratory equipment such as a fume hood, work benches, supply storage area, drying racks, standing press, standing paper cutter, tools, horizontal press, sonic welder, leaf caster and other equipment that can be used cooperatively with other libraries in the future. See also the basic list of supplies in Appendix E in this Final Report.

Responsibility: AUL for Collection Development and Preservation Librarian (involve Director of O & M and Architectural Services)
Timeframe: Immediately to Fifth year
Cost: High, equipment, renovation and construction, basic office equipment to get started

H. IMPROVE PHOTOCOPY SERVICES TO REDUCE DAMAGE TO LIBRARY MATERIALS

Photocopiers are an indispensable part of library service and preservation replacement that, nonetheless, can be damaging to certain items, such as tightly bound books, causing the text blocks to crack or brittle pages to break away from text blocks. These recommendations address solutions to these problems.

1. Carry out a photocopy needs survey to find out where copy machines are located, their purpose and level of use, and types of materials copied at each location.

Responsibility: AUL for Public Services
Timeframe: Third year
Cost: Staff time

2. Investigate and acquire photocopiers designed to cradle books instead of cracking their spines, thus reducing stress and possible damage to books. This is equally important for public service copiers in all units and for units that need to provide copies for patrons of fragile and embrittled materials until such time as microfilm copies are made and from which future copying can be done with greater safety to the items.

Responsibility: AUL for Collection Development, AUL for Public Services and Preservation Librarian
Timeframe: Third to Fourth year
Cost: To be determined

3. Consider installing more photocopy machines in Doheny stacks on each stack level to, for instance, reduce the movement of materials from all stack levels, consequently reducing handling. This might be done on an experimental basis to determine and weigh the advantages and disadvantages that are only speculative at this time.

Responsibility: AUL for Public Services and Head, Access Services
Timeframe: Third to Fourth year
Cost: Staff time and possible additional equipment costs

4. Establish a photocopy service in East Library for materials located in this facility, thus reducing damage to materials that would otherwise be paged and transported to other library locations. Again, this measure is designed to reduce handling and consequent damage to materials.

Responsibility: AUL for Collection Development
Timeframe: Fourth year
Cost: New equipment and staff salaries

I. INSTALL PROPER AND ADEQUATE SHELVING AND STORAGE CABINETS

Preservation includes installation of proper shelving for materials from the time the material is acquired, until it is processed. It is not just an activity to be carried out after the material becomes damaged. Additional adequate and proper shelving is a major need for the USC libraries in order to implement and facilitate proper shelving and handling techniques discussed in Goal II. Shelving designed for specific types of material is needed in certain key areas.

1. Install more shelving in the East Library to store materials as they are weeded from overcrowded library collections and to provide for materials now stored in acidic boxes or on the floor in storage areas. The lack of air circulation on overcrowded shelves or in tightly sealed acidic boxes promotes mold growth and other damage to materials. Also materials stored on floors are vulnerable to flooding, dirt and dust particles and even, possibly, rodents.

Responsibility: AUL for Collection Development
Timeframe: Immediately
Cost: Installation of shelving

2. Consider compact shelving as an option to increase our storage capacity. Compact shelving requires special structural support to withstand the additional weight of a higher density of books. Whenever possible, strengthen flooring during renovation of library buildings. For new construction, provide floors capable of supporting compact shelving.

Responsibility: Library Administration
Timeframe: Third year and ongoing
Cost: High, capital improvement

3. Provide additional adequate shelving and reshelving areas, clearly designated, near all public photocopy machines to encourage patron care of materials.

Responsibility: AUL for Public Service and Public Service Unit Heads
Timeframe: Second to Fourth year
Cost: Staff time, to install or vacate shelves

4. Adequately reinforce shelving throughout the library system to assist in preventing the shelves from toppling in the event of earthquakes. Carry out an audit to assess present need. Identify alternative methods and their relative effectiveness. Encourage development of standards and, when available, apply them to our facilities.

Responsibility: Preservation Librarian, Facilities Coordinator and Director of O & M
Timeframe: Third to Fifth year
Cost: Staff time, costs of bracing to be determined

5. Install additional appropriate shelving in the Acquisitions and Cataloging Units wide enough to shelf folios, oversize materials, and other materials while in-process. Preservation of materials commences with the receipt of

materials and continues even while material is stored in cataloging backlogs.

Responsibility: AUL for Technical Services and Facilities Coordinator
Timeframe: Third to Fifth year
Cost: Staff time and new shelving

6. Investigate and report the need for other special cabinets and appropriate shelving for non-book formats throughout the library system. These materials include slides, compact disks, scores, films, recordings, and software, all prone to damage without special storage. The Non-Book Materials Task Force has surveyed most of these materials and identified their location and approximate numbers for the Cataloging Policy Committee. This information is useful to the preservation effort as well.

Responsibility: Preservation Librarian and Unit Heads
Timeframe: Second to Third year
Cost: Staff time and future expenditures to be determined

J. IMPROVE HOUSEKEEPING MEASURES

A neat and clean appearance of the library environment promotes user care, eliminates potential fire hazards, and discourages vermin infestations. Our study determined the need for enhanced housekeeping and cleaning service for the library building and stack areas beyond that now provided. This would include a thorough weekly cleaning (vacuuming, dusting, mopping, changing of trash can liners) and weekend trash removal.

1. Work closely with the Department of Operations and Maintenance to improve the quality of their service to ensure that trash and potential fire hazards are removed from stack areas, that aisles are kept free of unnecessary trash and equipment, that stack areas, such as level one of the Doheny Library, are not utilized as storage areas for other than library materials, and that trash is removed from public areas during the weekends.

Responsibility: Preservation Librarian, Unit Heads and Director of O & M
Timeframe: First year
Cost: Additional O & M staff time in cleaning facilities

2. Develop and implement a library-wide policy that promotes good housekeeping and maintenance by staff, users and custodial staff, and other workers in the library facilities, to include:
 - a. Periodic campaigns to reinforce no food, drink or smoking policies, especially during peak intervals of heavy use of the collections and facilities, such as exam periods.

b. Encourage library staff to take extra precautions following parties to clean up and remove trash from the building to discourage insects and rodents from entering collection locations.

c. Require custodial and maintenance staff and other workers in the library facilities to become familiar with the new policy and to observe standards. During the preservation study, there were many reports of negligence that violate present policies of no food and drink and indicate a need for preservation awareness training for Operations and Maintenance staff.

Responsibility: Preservation Librarian and all Library Staff (involve O & M appropriately)

Timeframe: First year and ongoing

Cost: Staff time and publicity and training costs

3. Carry out an investigation of current levels of vermin infestation in library facilities and take measures to eradicate existing problems as identified or reported.

Responsibility: Facilities Coordinator and Director of O & M

Timeframe: Third to Fourth year

Cost: Staff time and possible extermination costs

K. ESTABLISH GUIDELINES FOR PRESERVATION-SAFE EXHIBITS AND DISPLAYS

Exhibits of materials from our library collections are an important aspect of promoting our resources, educating library patrons and for development programs. The library sponsors and schedules regular exhibits to coincide with library-sponsored events and other academic conferences and programs, at least monthly and occasionally more frequently. The exhibit and display cases in all libraries require proper environmental consideration, proper book support and security.

1. Evaluate the exhibit and display cases in all libraries for proper environmental considerations. Consult *The Museum Environment* cited in "Suggested Readings and Viewings" in this Final Report.

Responsibility: Preservation Librarian

Timeframe: Third year

Cost: Staff time to evaluate, possible upgrading costs

2. Upgrade the environmental controls and security of exhibit cases considered essential to display artifactually important and research-level materials over the next five years. In the interim, consider alternatives for protecting the material displayed such as: minimizing the time the material is exposed; limiting the vertical cases to informational displays

and not books (especially rare and unique items); repairing or upgrading all locks; shielding lights in cases with UV filters; avoiding all display of books in cases near uncovered windows (Social Work Library and south exit case on the ground floor of Doheny Library).

Responsibility: Preservation Librarian and Facilities Coordinator
Timeframe: First year – implement alternatives; Second year to Fourth year – upgrade cases
Cost: To be determined

3. Coordinate all exhibits of library materials through the Preservation Unit. This will ensure appropriate consultation with the Preservation Librarian in handling exhibits. This is especially important until such time as the exhibit cases are preservation-sound.

Responsibility: Preservation Librarian
Timeframe: Immediately and ongoing
Cost: Staff time

4. Draft an exhibit policy establishing guidelines for the proper display of library materials and materials on loan to our library for special displays.

Responsibility: Preservation Librarian and Preservation Policy Committee
Timeframe: First year
Cost: Staff time

GOAL IV

ENHANCE STAFF AND USER PRESERVATION EDUCATION AND AWARENESS TRAINING

One of the major keys to an effective preservation program is trained, committed and actively involved staff and educated users. It is important to involve the staff in creating and carrying out plans for disaster preparedness, for creating and implementing preservation policies and procedures, to serve as liaisons and resource persons to the Preservation Librarian, to assist in setting goals and priorities, to accomplish specific projects, or to educate the community of users. Increased preservation awareness by university administrators, faculty, staff and students and specialized training and education for those who handle library materials is one of the wisest investments in preventive measures for prolonging the life of our collections and ensuring a sound foundation for our Preservation Program.

A. DEVELOP PRESERVATION ORIENTATION TRAINING FOR ALL LIBRARY EMPLOYEES

Provide orientation training for all library staff and student assistants, particularly all new employees, on a quarterly schedule. Instruction in proper handling of materials, identification and response to preservation problems, disaster preparedness, and the proper use of supplies and equipment such as those mentioned in Goal III, are basic to such programs. This will also involve the development of orientation and training materials and close communication with the Library Personnel Office.

Responsibility: Preservation Librarian and AUL for Administrative Services
Timeframe: First year and ongoing
Cost: Staff time and training materials

B. SUPPORT AND FUND STAFF PROFESSIONAL DEVELOPMENT ACTIVITIES AND ATTENDANCE AT LOCAL, REGIONAL AND NATIONAL PRESERVATION MEETINGS AND WORKSHOPS, PARTICULARLY IN THE INITIAL FIVE-YEAR START-UP

Responsibility: University Librarian
Timeframe: First year and ongoing
Cost: Suggest \$5,000/year minimum

C. EXTEND PRESERVATION AWARENESS TO ALL LIBRARY PATRONS AND CAMPUS COMMUNITY

Extend preservation awareness education to all users of the libraries and to the campus community. Suggested ways include incorporating preservation awareness into library tours and appropriate library publications, such as the

guides to the library and to specific collections, in bibliographic and course-related instruction programs, in exhibits, and through a wide variety of creative means designed to reach all sectors of the campus, to develop an informed and concerned community who will assist the library in saving our collections.

Responsibility: Preservation Librarian (involve other staff as appropriate)
Timeframe: Second year and ongoing
Cost: Staff time and supplies to be determined

D. DISSEMINATE INFORMATION ABOUT PRESERVATION AND USC'S ACTIVITIES THROUGH LIBRARY NEWSLETTERS AND OTHER CAMPUS PUBLICATIONS AND NEWS MEDIA

Responsibility: AUL for Collection Development and Preservation Librarian
Timeframe: Immediately and ongoing
Cost: Staff time and printing and mailing costs

E. SPONSOR GUEST SPEAKERS RELEVANT TO PRESERVATION AND CONSERVATION

Sponsor guest speakers, both locally and nationally known, with relevance to preservation/conservation of library materials. The Professional Development Committee should consider assisting in this effort and, during the first five years, present annual programs on preservation in conjunction with the Preservation Librarian, involving libraries in the Electronic Library Consortium. The Preservation Librarian should work closely with the Library Staff Development Program and Administrative Services to present similar programs for all library staff.

Responsibility: Preservation Librarian, Professional Development Committee and AUL for Administrative Services
Timeframe: Second or Third year and ongoing
Cost: Staff time, speaker fees, publicity and mailing costs

GOAL V LEADERSHIP, INNOVATION, AND COOPERATION

Since the magnitude of the preservation problems in all libraries and the associated costs are beyond any one library's ability to solve and support, we must seek ways to work in concert with local, regional and national groups and organizations to avoid duplication of effort, to gain knowledge about new developments in preservation methods and technology, to expand our resources, and to participate in major projects beyond our individual institutional capabilities. We should use discretion and select those opportunities that benefit our preservation program and become involved in existing groups and organizations where a preservation component might be added. Such an opportunity exists for USC, in terms of a leadership role regionally, involving the private academic institutions which form the Electronic Library Consortium and public institutions such as UCLA.

A. PARTICIPATE ACTIVELY IN THE LOS ANGELES PRESERVATION NETWORK (LAPNET)

This year members of the USC library staff have attended workshops and meetings of LAPNet. In the future USC should send two representatives to the meetings of this group and ensure that USC participate in programs and workshops, and, when feasible, take an active role in organizing programs.

Responsibility: AUL for Collection Development and Preservation Librarian
Timeframe: Immediately and ongoing
Cost: Staff time and possible mileage expenses for group travel to workshops

B. PLAY AN ACTIVE ROLE IN NATIONAL COOPERATIVE PROGRAMS

Attend meetings and actively participate in projects at the national level through our membership in the Research Libraries Group, through the American Library Association and the newly established National Commission on Preservation and Access.

Responsibility: Library Administration and Preservation Librarian
Timeframe: Immediately and ongoing
Cost: Membership costs, staff time, travel related costs

C. EXPLORE COOPERATIVE PRESERVATION LINKS WITH ELECTRONIC LIBRARY CONSORTIUM

Explore possibilities of forming a Cooperative Preservation Committee with representation from members of the Electronic Library Consortium to

investigate, plan and implement cooperative projects such as mass deacidification, mass freeze-drying, clearinghouse for information exchange of preservation information, and other joint activities identified by the survey carried out by the Task Force on Interinstitutional Cooperation. Benefits include sharing of resources, advantages in grant applications, and possibility of implementing large projects beyond the scope of a single institution.

Responsibility: Library Administration and Preservation Librarian
Timeframe: Second year
Cost: Staff time, future project costs to be determined

D. DEVELOP GRANT PROPOSALS TO SUPPORT LONG AND SHORT-TERM PRESERVATION AND CONSERVATION PROJECTS

Develop grant proposals for assistance in funding preservation projects after our Preservation Program is well established. Utilize information about granting agencies and sources of funding provided by the task force reports and in Appendix G of this Final Report. Priorities identified by the Study Team include grant support for developing a preservation/conservation intern and apprentice program to provide experience to new conservators and supply assistance in the Preservation Unit; grant support for a brittle-books preservation program for special subject areas in which USC has notable and unique national strengths; grant support for joint projects among members of the Electronic Library Consortium and/or sister institutions such as UCLA or the Los Angeles Public Library.

Responsibility: Preservation Librarian and AUL for Collection Development
Timeframe: Second to Third year
Cost: Staff time and grant preparation fees to be determined

E. DEVELOP PRESERVATION ACTIVITIES WITH FRIENDS OF THE LIBRARY AND OTHER CAMPUS AND COMMUNITY GROUPS

Develop preservation projects with groups such as the Friends of the USC Libraries. Suggested activities include preservation awareness programs, fund-raising projects, and volunteer programs.

Responsibility: University Librarian
Timeframe: Third year
Cost: Staff time

PRIORITIES FOR ACTION: 1989-1990

PRIORITIES FOR ACTION: 1989-1990

The Study Team recommends these first year objectives necessary to immediately establish a framework for the USC Preservation Program. These objectives provide high impact, long-range benefits and can be accomplished with local resources without grant funding.

GOAL I: ORGANIZATION OF PRESERVATION UNIT AND PROGRAM

1. Create Preservation Unit within the Collections Division. Because of the added dimension of management for the collections, consider renaming the division the Collection Development and Management Division.
2. Complete draft of long-range plan for equipping the Preservation Unit space and facilities, provide basic space, facilities and supplies to begin work this year.
3. Establish Preservation Liaison Network to begin communications between Preservation Librarian and other units.
4. Establish the Preservation Policy Committee to begin assisting the Preservation Librarian in drafting USC's Preservation Policy Statement.
5. Appoint a Task Force for the Disaster Action Plan and create Disaster Action Team.
6. Begin earmarking all preservation expenses in the budget to document and provide information for future funding proposals and budgeting. Establish a budget for preservation expenses.
7. Reassign the Bindery Unit to the Preservation Unit. Utilize staff for the new Commercial Binding Section of the Preservation Unit.
8. Develop a plan to create the Filming/Text Preservation Section and reassign staff from the Micrographics Department.
9. Hire essential preservation staff to begin assisting the Preservation Librarian: Clerk/Secretary and Head Conservator.
10. Incorporate preservation responsibilities into all present and new job descriptions. For some this requires consultation with the Preservation Librarian, for others a general statement, such as the following, would suffice: *Demonstrate awareness of preservation as it relates to the Central Library System and actively participate in preservation programs, as required.*
11. Bring conservator as consultant to evaluate supplies and methods of present preparation, mending and in-house binding and to recommend preservation/conservation-safe supplies and methods.

GOAL II: LIBRARY COLLECTIONS

1. Draft the Disaster Action Plan following the guidelines provided in Appendix F of this report.

2. Establish criteria for new funds: replacement fund and high-use funds in the book budget for implementation in 1990.
3. Implement new recommendations regarding preservation-conscious cataloging and acquisitions policies and guidelines.
4. Order plastic book bags for circulation units before autumn rains.
5. Survey binding needs of units, evaluate present commercial bindery and binding work-flow, and develop a plan which would include a basic binding manual to begin educating staff and selectors on binding options.
6. Begin annual incremental increases in commercial binding budget to address needs identified in survey until goal achieved.
7. Eliminate all fore-edge shelving.
8. Eliminate the use of paperclips, post-it notes, staples, rubberbands, tape and other similar attachments on library materials. Identify alternatives for notes and the like that accompany in-process materials
9. Empty book drops more frequently and consider closing book drops when libraries are open to encourage patrons to return books to the circulation desks.
10. Store all microform masters in safe offsite locations.

GOAL III: BUILDINGS, FACILITIES AND EQUIPMENT

1. Develop a plan for monitoring temperature, humidity and light, purchase necessary equipment, begin monitoring and documenting conditions.
2. Encourage and train staff to keep doors and windows closed in climate-controlled library facilities.
3. Implement suggested alternatives to environmentally protect rare and fragile materials until HVAC systems are installed.
4. Request a fire prevention audit.
5. Evaluate existing fire detection/suppression systems for USC.
6. List potential flood areas and work with O & M to correct problems.
7. Locate a deep freeze facility near USC for salvaging water-damaged materials in a disaster.
8. Draft preservation impact study for the Teaching Library.
9. Begin replacing all unsafe book trucks and bookends with proper and preservation-safe ones after surveying unit needs.
10. Initiate improved cleaning of facilities and collections by equipping units with basic cleaning supplies and hand-held vacuums, and train staff to carry out cleaning systematically in all collections. Investigate need for a cleaning of the entire library collection.
11. Begin installing UV light filters in target areas and monitor light levels. Purchase necessary equipment.
12. Install independent light switches on each stack row in East Library Storage immediately to reduce damage from light and light-induced heat.

13. Begin equipping and renovating facilities in East Library for the Preservation Unit.
14. Install more shelving in the East Library in order to facilitate storage of materials being moved to the East Library or currently stored in boxes and/or on the floor in the East Library.

GOAL IV: STAFF AND USER EDUCATION

1. Implement training for staff and users on proper handling of library materials starting in fall semester. Add preservation education to our regular library tours, to any bibliographic instruction sessions, and hold special workshops for staff, especially unit heads.
2. Incorporate disaster response training into staff orientation and training as soon as Disaster Action Plan is complete.
3. Begin supporting and funding library faculty and staff participation and attendance at workshops and conferences on preservation, e.g., LAPNet, RLG, ALA and others in specialized subject fields.
4. Disseminate information about preservation through our Library Newsletter (resurrect this as soon as possible).

GOAL V: LEADERSHIP, INNOVATION, COOPERATION

1. Send two representatives from USC to all LAPNet meetings, per LAPNet's suggestion, and keep library staff informed on LAPNet activities.
2. Participate in major national preservation meetings of ALA, RLG, and others.

Lastly, a final suggestion:

Draft objectives for 1990-91, toward mid-year, to continue momentum of the Preservation Program. Disseminate this document to all library units and include the Preservation Policy Committee appropriately in establishing next year's objectives.

FIVE YEAR IMPLEMENTATION PLAN

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FIVE YEAR IMPLEMENTATION PLAN (arranged by goal)

Immediate	1st yr	2nd yr	3rd yr	4th yr	5th yr
IA	LB1				
	LB2				
LB3					
LC					
LD1		LD2			
	LD3				
	LE1	LE2	LE3	LE4	LE5
	LF1				
	LF2				
IF3		IG	IIA1		
		IIA2	IIA3		
		IIA4			
	ILB1		ILB2		
		ILB3			
		ILB4			
		ILC1			
		ILC2			
		ILC3			
		ILC4			
		ILC5			
ILD1	ILD2		ILDS		
	ILD3				
	ILD4				
		ILD6			
		ILD7			
		ILD8			
	ILE1				
	ILE2				
ILE4	ILE3				
		ILF1			
	ILF3	ILF2			
		ILF4			
ILG1					
ILG2					
ILG3					
	ILG4				
	ILH1				
	ILH2				
	ILH3				
	ILH4				
					ILHS

Immediate	1st yr	2nd yr	3rd yr	4th yr	5th yr
	IIIA1		IIIA2		
			IIIA3		
IIIA4			IIIA5		IIIA6
	IIIA7				
	IIIB1				
	IIIB2				
		IIIB3			
		IIIB5		IIIB4	
	IIIC1				
	IIIC2				
IIIC4			IIIC3		
	IIID				
	IIIE1				
	IIIE2				
	IIIE3				
	IIIE4				
	IIIE5				
	IIIE6				
	IIIE7				
	IIIE8				
	IIIF1				
	IIIF2				
	IIIF3				
	IIIF4				
IIIG					
			IIIH1		
			IIIH2		
			IIIH3		
				IIIH4	
IIII1					
			IIIJ2		
		IIIJ3			
			IIIJ4		
			IIIJ5		
		IIIJ6			
	IIIJ1				
	IIIJ2				
			IIIJ3		
			IIIK1		
IIIK3					
	IIIK4				
	IIIV.A				
	IIIV.B				
IIIV.D		IIIV.C			
		IIIV.E			
V.A					
V.B					
		V.C			
		V.D			
		V.E			

GLOSSARY OF KEY WORDS

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ACID FREE: Generally in reference to storage containers for library materials, acid free implies that supplies are manufactured so that the pH of the item is seven or higher. These supplies include folders, interleaving paper, boxes, metal shelving, and marking inks. In reference to library materials, acid free implies alkaline (permanent) paper construction.

BINDING: The method whereby pages are attached to one another at the spine. This includes stitching, which is the thread used in large stitches to hold the sections or signatures of the book together and sometimes to fasten the body of the book to the covers. It also includes glue, which is used in many books to fasten pages together and to fasten the body of the book to the boards. It may also include staples, plastic or metal spiral bindings, as well as "openable" ring binders.

BRITTLE BOOKS: Books in which the pages have become embrittled. See also **EMBRITTLED PAPER** and **POOR CONDITION**.

CENTRAL LIBRARY SYSTEM: All of the USC library collections excluding the Health Sciences, Law, and Arnold Schoenberg Institute libraries.

CLEANING: Used in two meanings in this report. In the first and most common usage it refers to maintenance-type cleaning of books. This includes dusting, vacuuming, and, rarely, washing of books. In the second and less common usage in this report it refers to a specific action performed by a conservation librarian or technician. This may involve the use of chemical solvents, various brushes, erasers, or scrapers.

CONSERVATION: Often used interchangeably with preservation, conservation is preservation at the item level. It involves, but is not restricted to, paper repair, deacidification, cleaning, binding, or encapsulation. The aim in conservation is to preserve the item as an artifact using restoration techniques that are reversible and ethically sound, often at great cost. See also **PRESERVATION**.

COVERS: The cardboard providing stiff backing to a book and the fabric, paper or leather "covering" the boards on the outside of the book.

DEACIDIFICATION: The process of neutralizing the acids inherent in papers manufactured since ca. 1850. Acids attack the cellulose fibers used to produce paper resulting in embrittled paper which renders it unusable. In order to halt this deterioration, the acids are neutralized and, in some cases, a buffer is deposited to counteract future acidification. Specific techniques include interleaving, aqueous baths or sprays of calcium carbonate, and gaseous deacidification (the method currently being developed by the Library of Congress because of its ability to deacidify in mass).

DISASTER PREPAREDNESS: The ability to respond promptly and appropriately to a wide range of disasters, both major and minor, including fires, floods, and earthquakes. For the purposes of this report, disaster preparedness pertains primarily to the preservation of library materials and structures housing library materials.

ELECTRONIC LIBRARY CONSORTIUM: A group of local higher-educational institutions for whom USC provides on-site electronic access to the USC Central Library System online service which includes Homer and USCInfo. The members are: Pepperdine University, California Lutheran University, Whittier College, Loma Linda University, the Claremont Colleges, and William Lyon University.

EMBRITTLED PAPER: Paper that is cracked, crumbling, and missing pieces. The paper is yellowing. Pieces of paper may shower down when the book is shaken gently upside down (fore-edge down). Breaking or cracking of the page occurs when a fold test of three double folds is employed at the corner and is tugged gently. See also BRITTLE BOOKS and POOR CONDITION.

ENCAPSULATION: The process of enclosing a document, generally one sheet, in an inert transparent plastic environment in order to facilitate safe handling and/or isolation from the environment. This should not be confused with lamination in which the plastic enclosure becomes attached (generally through heat) to the document itself. Lamination, used for conservation of library materials in the 1940s through the 1960s, almost always damages the materials it was designed to protect. Encapsulation creates no connection between the enclosure and the document other than juxtaposition. It is entirely reversible. An encapsulation may be sealed using ultrasound, heat, or adhesives.

ENVIRONMENTAL CONTROLS: Any equipment or mechanism used to maintain or change the temperature, humidity, light, and amount of airborne particulate matter in a given library location. This includes heating, ventilation, and air-conditioning systems; fans; windows; humidifiers; dehumidifiers; and their associated controlling mechanisms such as thermostats or humidistats. See also HVAC SYSTEM.

FAIR CONDITION: One or more of the following conditions may be present:

Paper: may show tears or small missing pieces; edges may look slightly worn; slight yellowing of paper may have occurred, especially the edges; no pieces shower down when the book is gently shaken upside down; no tearing or breaking occurs when the corner of a page is pulled gently; when a fold test of three double folds is employed, no breaking or tearing occurs when the corners are pulled gently.

Binding: stitching, if used may be loose, but not broken; glue, if used, is in good shape (not dried or cracked); pages may seem loosened if tugged gently, but no more than two or three pages are actually loose; spiral bindings, if used, may show wear but integrity is maintained; staples, if used, may be rusted but are still functional.

Covers: boards are fastened to book, but there may be a crack at the hinge either inside or outside; corners of boards may be bent or worn but are not missing or badly broken; spine may have minor tear (perhaps at head or tail) but is not ripped off or missing; cover is still intact but may need minor repair, may be showing signs of wear, or may have been repaired.

FOLIO: A book thirty centimeters or more in height.

FORE-EDGE: The edge of the book opposite the spine, i.e., the right edge when the book is held with the title facing up. See also **SPINE-EDGE**.

FORE-EDGE SHELVING: The act of shelving a book on its fore-edge, i.e., with its spine up. This often causes the spine and binding to be weakened by separation from the text block. Fore-edge shelving is generally found on shelves too short to permit standard vertical spine shelving. Solutions include adjusting the shelves to allow for vertical spine shelving, shelving the volume with the spine down (with the fore-edge up), or moving the volume to folio (oversize) shelving.

GOOD CONDITION: All of the following conditions must be present:

Paper: not cracked or crumbling; edges are not worn or roughened; no yellowing of paper has occurred; no pieces shower down when the book is shaken upside down; when a fold test of three double folds is employed, no tearing or breaking occurs when the corner of the page is pulled gently.

Binding: stitching, if used, is intact; glue, if used, is in good shape (not dried or cracked); pages are fastened in tightly if tugged gently; there are no loose pages; spiral bindings or staples, if used, are intact and in good condition.

Covers: boards are fastened to book, there are no breaks at hinges either outside or inside; corners of book are not broken, bent, or missing; spine of book is not torn and there are no pieces missing; the spine cover is fastened tightly; cover is not torn or badly worn; no repair work has been done.

HALON SYSTEM: A fire suppression system employing the inert gas, Halon, in place of water in a network of permanently installed pipes. It is one of the most expensive systems to install and maintain; however, it is the least damaging for library materials in the event of a fire or accidental activation.

HVAC SYSTEM: Heating, ventilation, and air-conditioning systems and their associated control mechanisms. These systems are generally thought of as central (i.e. encompassing an entire building) although isolated local HVAC systems are also possible. See also **ENVIRONMENTAL CONTROLS**.

LAPNET: The Los Angeles Preservation Network was initiated to investigate disaster preparedness, response, and recovery in local libraries. However, it has broadened its perspective to include other preservation issues pertinent to local collections. Its steering committee is made up of representatives from the University of California at Los Angeles, the Los Angeles Public Library, the Los Angeles County Museum of Art, the Huntington Library, the Getty Center and Conservation Institute, the Southwest Museum, the Clark Library, and the University of Southern California.

LIBRARY MATERIALS: The myriad items such as: books, serials, maps, computer software, archives, visual media, scores, and sound recordings that are collected by a library.

MUTILATION: The intentional marring or destruction of a volume. It may include torn out pages, underlining or other writing in the text (which is not deemed to increase the value as an artifact). It does not include accidental occurrences such as coffee spills or water rings on the covers.

O & M: USC's Operations and Maintenance Department, whose responsibilities include: facilities management, the physical plant, and custodial services.

POOR CONDITION: One or more of the following conditions may be present:

Paper: cracked, torn, missing pieces, crumbling; edges are worn or badly roughened; there may be yellowing of paper; pieces of paper may shower down when the book is shaken gently upside down; tearing or breaking or cracking of pages occurs when the corners are pulled gently; when a fold test of three double folds is employed at the corner, breaking or tearing occurs when the corner is tugged gently.

Binding: stitching, if used, is broken or needs repair; glue, if used, is dried and/or cracked; pages are not tight and may fall out of the book; several pages are loose (more than three); spiral bindings, if used, show loss of integrity; staples, if used, may be rusted or have torn into paper and are no longer functional.

Covers: boards are not fastened to the body of the book, or so badly broken at the hinges that they need immediate attention; corners are broken, missing, or worn away; spine has major damage, is torn clear away from the body of the book, or is missing major portions; cover is badly torn, worn, or missing large portions.

See also **BRITTLE BOOKS** and **EMBRITTLED PAPER**.

PRESERVATION: Often used interchangeably with conservation, preservation generally refers to any and all activities whose aim is to help ensure the longevity of library materials for use. This can involve methods to retain the text such as microfilming programs, proper handling of library materials, restricting the use of materials, safe display of materials, proper photocopying guidelines, as well as conservation to preserve the item as artifact. See also **CONSERVATION**.

PRESERVATION LIBRARIAN: The head of the Preservation Unit who coordinates preservation and conservation activities in the USC Central Library System.

PREVENTION: The act of precluding damage, loss, or activities which may result in damage or loss to library materials (an example might be the issuing of plastic bags upon the checkout of library materials on rainy days). The essential principle involved is that it is generally less costly to prevent damage or loss than it is to respond to damage or loss once it has occurred.

RBMS: The Rare Book and Manuscript Section of the American Library Association.

REFORMATTING: The use of technology to preserve the information originally contained in one medium by transferring it to another medium such as microforms, optical discs, or magnetic storage. See also **REPLACEMENT**.

REPLACEMENT: Acquiring a new copy of a book to replace a damaged or embrittled copy. If paper copies are not available the information may be reformatted. (Other library materials such as sound recordings also may be replaced when they become damaged or otherwise unusable.) See also **REFORMATTING**.

- RESEARCH LIBRARIES GROUP (RLG):** A corporation owned by major universities and research institutions of which USC is a member. Its goals are: to provide a structure through which common problems can be addressed; to provide sophisticated access to bibliographic and other forms of information; to enable libraries to manage their catalogs in an automated mode; to promote, develop, and operate cooperative programs in collection development, preservation of library materials, and shared access to research materials.
- SELECTOR:** An individual responsible for helping to develop the library collections at USC.
- SHELVING:** Any one of a number of storage units for library materials as well as the process by which those same materials are stored. Physical units include shelves, cabinets, and drawers.
- SPINE-EDGE:** The left edge of a book when held with the title facing up, the bound edge of a book. See also FORE-EDGE.
- TEACHING LIBRARY:** A new library facility at USC, currently in the planning stages. The building is scheduled to open in the fall of 1992. The Teaching Library's focus is on providing collections and services in support of all teaching at USC. Central to the concept of this library is the integration of technology into all aspects of teaching and library service.
- TEXT BLOCK:** That part of a book consisting of the pages which excludes the covers (boards and spine).
- TREATMENT:** Various methods used to preserve library materials. They may include conservation activities such as deacidification, restoration binding, pH testing, boxing, and encapsulation.
- ULTRAVIOLET:** The most harmful part of the light spectrum for library materials. Flourescent lights emit significant amounts of ultraviolet radiation while incandescent lights emit only minimal amounts of ultraviolet radiation. Sunlight also emits significant amounts of ultraviolet radiation. Filters can be purchased which will reduce radiation damage from flourescent lamps and sunlight. Flourescent lamps which do not emit ultraviolet light are also available.
- UNIT HEAD:** The individual in charge of the administration of a unit (i.e. branch, department, or section) within the USC Central Library System. This person generally reports directly to an Assistant University Librarian (AUL).

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 - Task Force B: Physical Condition of the Collections.
 - Task Force C: Organizing for Preservation.
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- National Preservation News.*

APPENDICES

- A. UNIVERSITY LIBRARIAN'S CHARGE TO THE STUDY TEAM**
- B. ORGANIZATION CHARTS**
 - USC CENTRAL LIBRARY SYSTEM**
 - PRESERVATION UNIT**
 - PRESERVATION PROGRAM**
- C. JOB QUALIFICATIONS AND REQUIREMENTS FOR PRESERVATION UNIT STAFF**
- D. CONDITION OF THE COLLECTION/TEMPERATURE GRAPHS**
- E. BASIC PRESERVATION SUPPLIES**
- F. GUIDELINES FOR DISASTER ACTION PLAN**
- G. GRANT SOURCES**

APPENDIX A

UNIVERSITY LIBRARIAN'S CHARGE TO THE STUDY TEAM

UNIVERSITY OF SOUTHERN CALIFORNIA

UNIVERSITY LIBRARY

UNIVERSITY PARK

LOS ANGELES, CALIFORNIA 90089-0182

UNIVERSITY LIBRARIAN
DEAN AND VICE PROVOST

COLIN KEYS LOVELL
UNIVERSITY PROFESSOR

MEMORANDUM

To: Library Preservation Program Study Team

From: Charles R. Ritcheson

Date: September 30, 1987

Subject: CHARGE TO THE STUDY TEAM

The Library's collections are among the University's most important capital investments, at present growing in value by well over \$2,000,000 annually. (A single gift last year was valued at \$3,000,000.) USC has been building this capital resource from the day it was founded more than 100 years ago. It is an irreplaceable and absolutely vital resource; but under present circumstances it is not a durable one. Fundamentally the mission of the Library's preservation initiative is to remedy this tremendous problem and to develop a program to protect our collections and the immense capital investment they represent.

We have already made some significant progress: the new climate control system now on the point of coming up will make it possible for the first time to address preservation questions in a systematic way. We are committed to the appointment of a preservation officer and the creation of an appropriate infrastructure. And we are now embarking on a study in cooperation with the ARL-sponsored Preservation Planning Program, a self-study and consulting program administered by the ARL's Office of Management Study.

Because this self-study must truly represent an institutional as distinguished from an administrative commitment, I am appointing a Preservation Planning Program Study Team to provide the necessary leadership in achieving the goals I outline below.

This memorandum is my charge to the Preservation Planning Program Study Team. It states what I would like them to achieve, outlines the Program's methodology, and suggests a timetable. To promote the widest possible understanding of the Preservation Planning Program and what the Study Team will be doing over the next several months, I am sending a copy of this memorandum to all faculty and staff.

Program Goals

I ask that the Study Team produce for the Library a strategic plan for preservation activities, and give me a demanding but realistic set of objectives for those activities for the next five years. The plan should be strategic in the sense of setting preservation activities properly in the broad context of Library operations, priorities, and broad budgetary commitment. In addition, the plan should recommend specific courses of short and mid-term action that will enable us to carry out our strategic purposes. Nothing relating to preservation is off-limits to the Study Team, and certainly it should consider the broadest range of issues--everything from disaster control to humidity control, from our binding to collection condition surveys, from educational programs to cooperative action with other institutions.

We need, then, a definite plan of preservation action: what needs to be done; in what order; in what time frame; supported by what administrative arrangements; requiring what budget? Money will be a central issue. The Team's plan should reflect the opportunities that exist to raise money through gifts, endowments, and grants, and, if at all possible, project levels of support thought achievable over the next five years.

Program Methodology

The Preservation Planning Program is a self-study program. We will have substantial consulting help from OMS, but the success of the Program will depend on all of us.

As the OMS manual makes clear, the self-study methodology involves the appointment of a Study Team and of a set of Task Forces. The Study Team is responsible for the overall conduct of the Program. The Study Team will first prepare a background paper that identifies the key issues for investigation and action. Second, Task Forces will be appointed (their chairs being members of the Study Team) to investigate each major issue and to make recommendations for action. Finally, the Study Team will review the reports of the Task Forces and prepare a report and set of recommendations for action. An OMS consultant will visit the Library at the outset of each of these three critical stages to help ensure that each is carried out as fruitfully as possible.

Library Preservation Program Study Team
September 30, 1987
page 3

The OMS manual identifies five areas of possible investigation. I believe that two of them are high priority concerns for USC: a survey of the physical condition of the collections, and consideration of how our preservation activities might best be organized and administered. Three other issues appear to me to have medium priority for us: a survey of environmental conditions, disaster control, and assembling information and mounting instructional programs. The Study Team should of course develop its own sense of priorities and expand on this list of concerns, if it wishes to. I would like to know of any significant departures from the OMS manual, should they occur.

I am asking the following persons to serve on the Study Team:

Barbara Robinson, Chair
Bridget Molloy
Don Thompson
Melinda Hayes
Loss Glazier
Wayne Shoaf
Lynn Sipe, ex officio

As an early item of business, I ask the Team to consider appointing from among itself chairs for the following Task Forces:

Task Force A: Environmental Conditions
Task Force B: Physical Condition of the Collections
Task Force C: Organization
Task Force D: Disaster Control
Task Force E: Preservation Resources and Instructional Programs

I am also asking Barbara Robinson to sit as a member of all the Task Forces in addition to any she may be called upon to chair.

Timetable

The Task Force is asked to establish its own timetable; but I think it reasonable to expect the background paper to be completed by the end of the present semester. The Task Forces could then complete their work by Easter break, 1988; and the Final Report might be presented in September, 1988.

Library Preservation Program Study Team
September 30, 1987
page 4

Of course I cannot commit myself to carrying out the final recommendations of the Study Team until I have seen and considered those recommendations with the administrative staff. What I can say, however, is that I am firmly committed to our having a strong and effective preservation program. I believe the OMS Preservation Planning Program is the best way for us all to shape such a program and to work together to bring it into existence.

CRR:tf

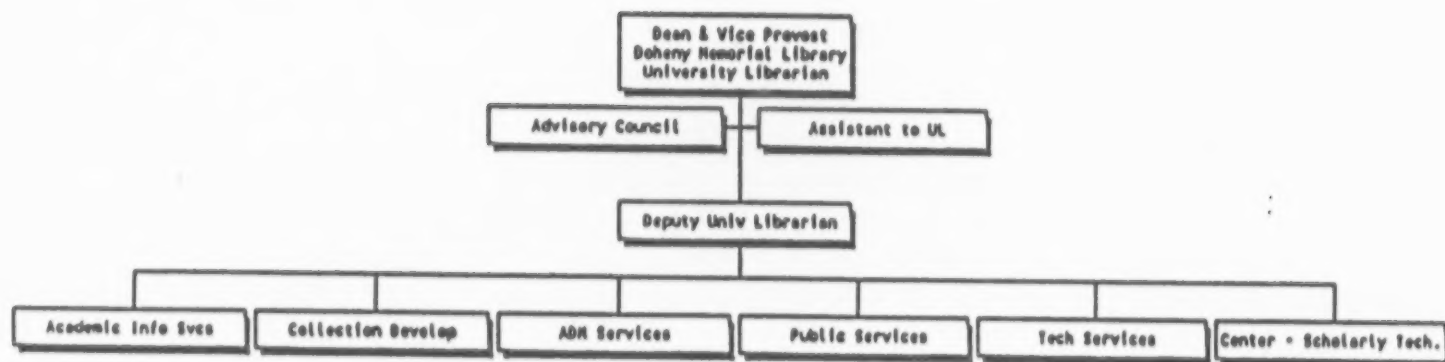
cc: Library Faculty and Staff

APPENDIX B

ORGANIZATION CHARTS

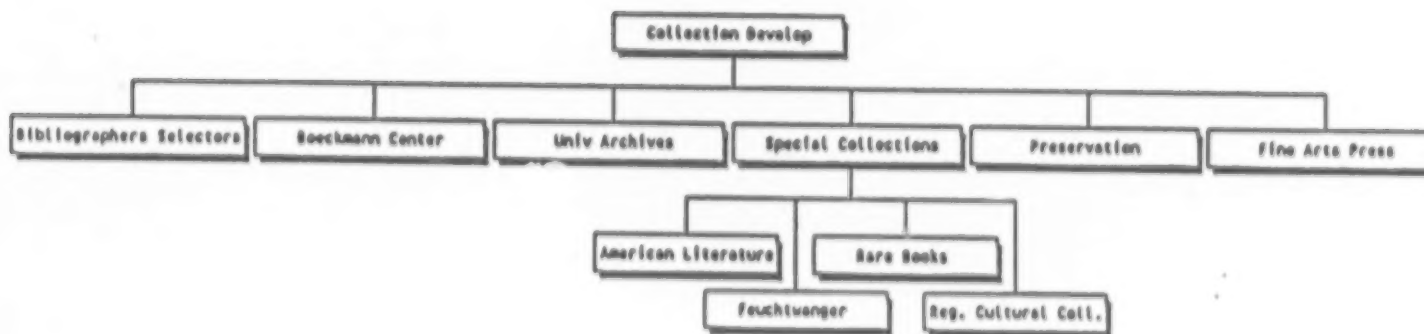
**USC CENTRAL LIBRARY SYSTEM
PRESERVATION UNIT
PRESERVATION PROGRAM**

UNIVERSITY OF SOUTHERN CALIFORNIA
University Libraries
Organizational Chart



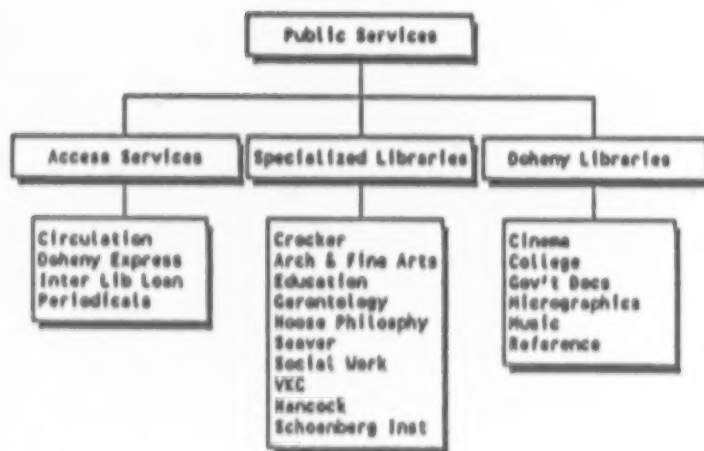
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Revised 11/14/86

UNIVERSITY OF SOUTHERN CALIFORNIA
University Libraries
Organizational Chart



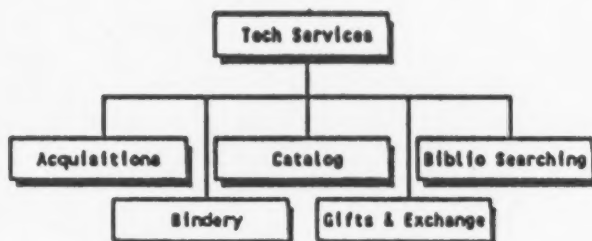
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Revised 11/16/88

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University Libraries
Organizational Chart



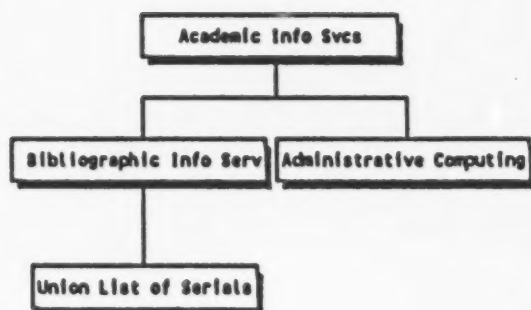
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UNIVERSITY OF SOUTHERN CALIFORNIA
University Libraries
Organizational Chart



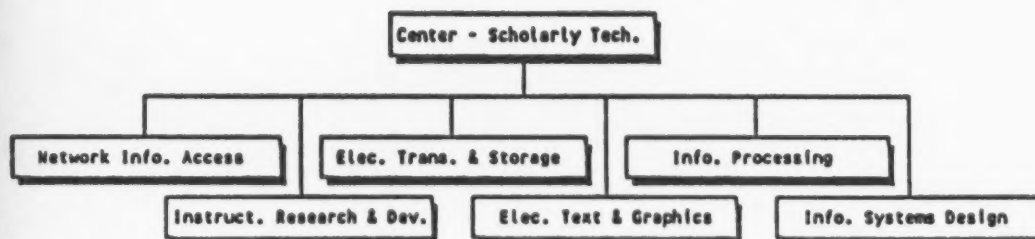
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Revised 11/14/88

UNIVERSITY OF SOUTHERN CALIFORNIA
University Libraries
Organizational Chart



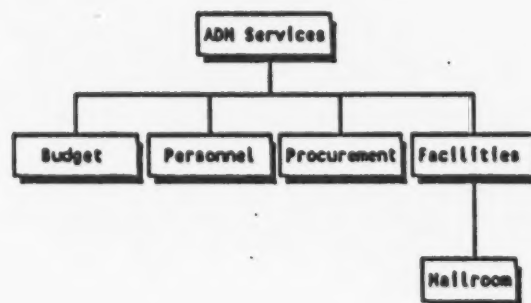
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Revised 11/14/88

UNIVERSITY OF SOUTHERN CALIFORNIA
University Libraries
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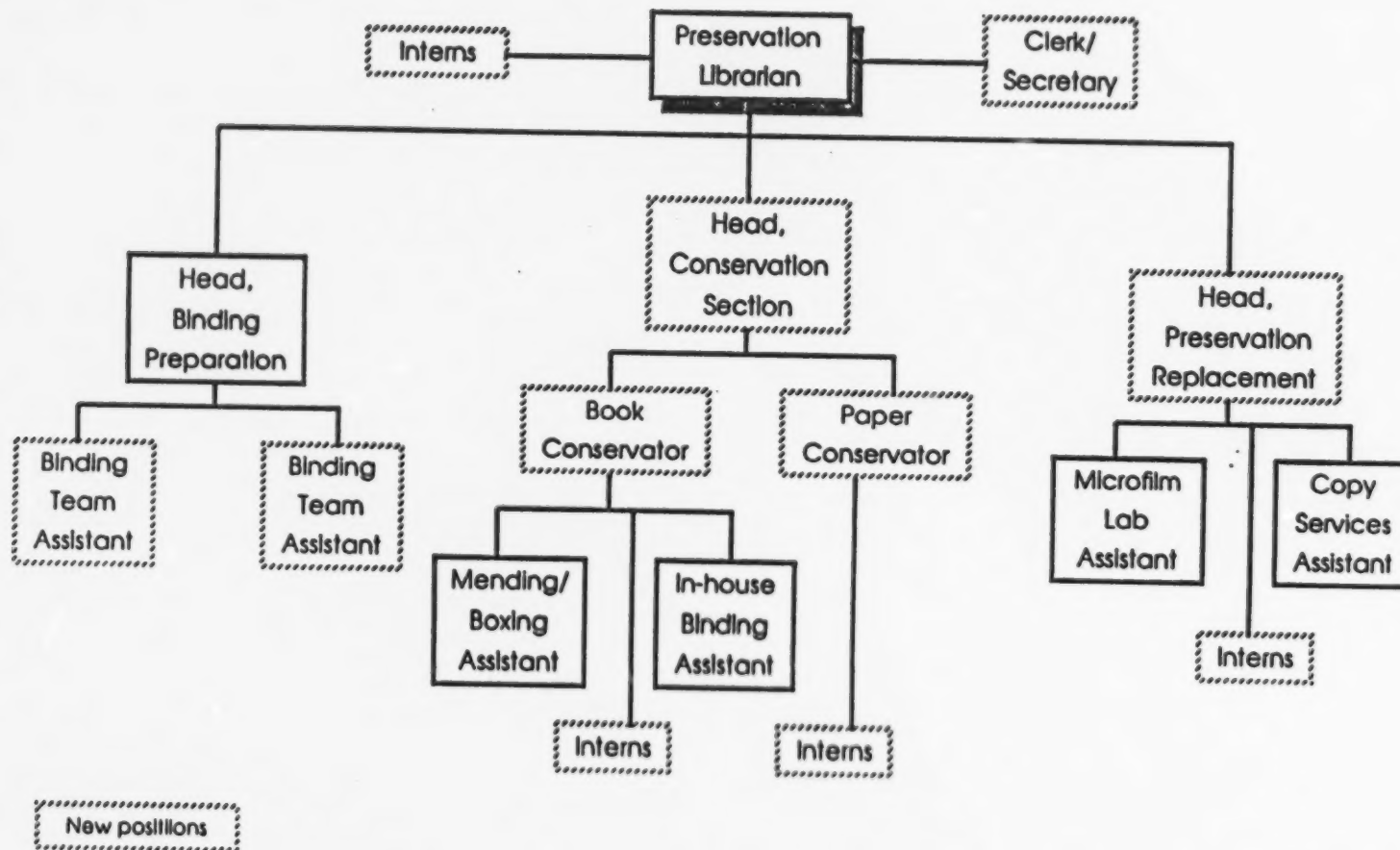
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University Libraries
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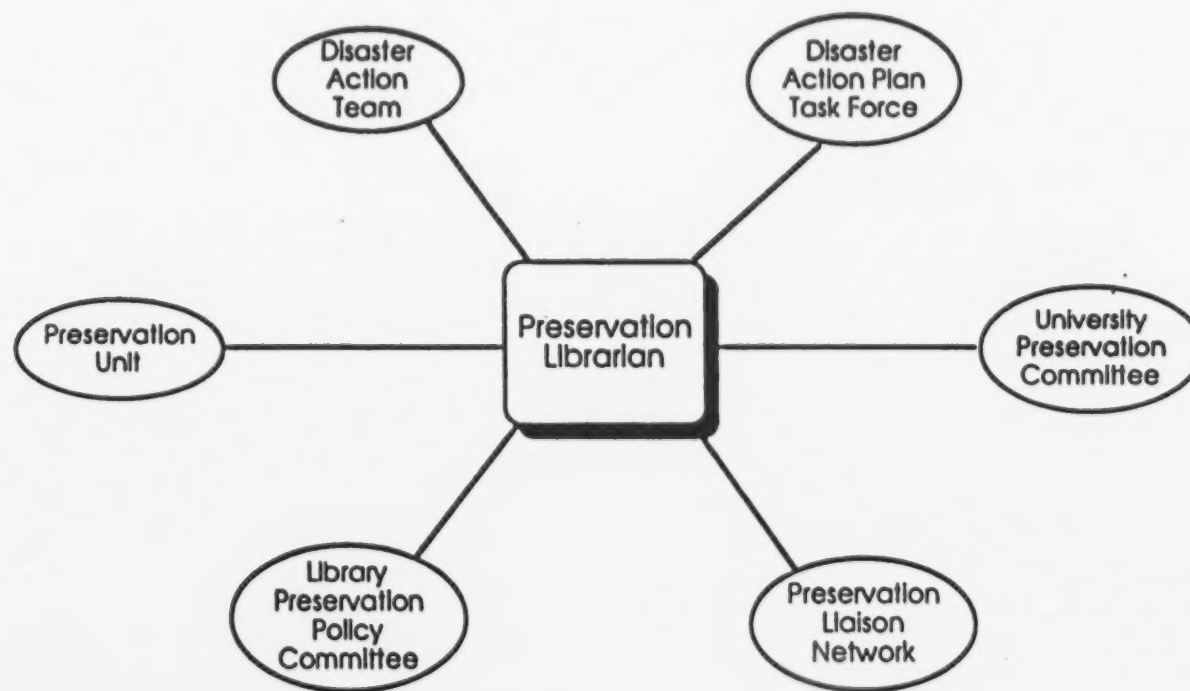


By: Carolyn J. Henderson
Revised 11/14/88

PRESERVATION UNIT



PRESERVATION PROGRAM OF THE CENTRAL LIBRARY SYSTEM



APPENDIX C

JOB QUALIFICATIONS AND REQUIREMENTS FOR PRESERVATION UNIT STAFF

APPENDIX C

JOB QUALIFICATIONS AND REQUIREMENTS FOR PRESERVATION UNIT STAFF (See also Appendix B: Preservation Unit Chart)

PRESERVATION UNIT, HEAD:

Preservation Librarian

Responsibilities: Directs, coordinates and supervises all preservation activities of the Preservation Unit and the Preservation Program. Responsible for providing leadership and support for planning, developing, implementing and administering the Library's preservation policies and procedures, focusing on collection assessment and collection maintenance through document preservation and reformatting, environmental controls, disaster planning, staff and user education, grant writing, and cooperative projects with other libraries and organizations. The incumbent should organize, manage and plan the three sections of the Preservation Unit, serve as Chair of the Library's Preservation Policy Committee and be closely involved in staff educational activities, consulting, current awareness activities and disaster action planning.

Specialized qualifications: Desirable qualifications include demonstrated administrative and supervisory experience, preferably in a conservation setting, well-developed interpersonal skills, competence in physical treatment, knowledge of current preservation issues and concerns, ability to conceptualize and organize programs, develop and direct staff, and plan and monitor budgets. The incumbent should have an understanding of the relationship between bibliographic control and preservation in a research facility and a strong background in collection development and success in teaching/training activities, with a broad understanding of research libraries, the Teaching Library and its place within the University structure.

SECTION HEADS:

*Head Conservator

Responsibilities: Direct the activities in the Mending/Repair Section and Conservation Laboratory, reporting to the Preservation Librarian. The incumbent should design and implement a comprehensive program of book and paper

*New positions to be recruited, when budgeted.

conservation, assisting the Preservation Librarian in long-term preservation planning, determining the priorities and workflow of the Conservation Section, performing a variety of conservation treatments, including work on text blocks and covers, such as repair, resewing, rebacking, and paper treatments, other treatments such as encapsulation, deacidification and making protective enclosures, training and supervising the conservation staff, monitoring the quality of work, evaluating tools and equipment, and establishing procedures for their use, recommending treatment options to prolong the life of materials, and serve as a resource person for the Library System in general conservation and training.

Specialized qualifications: Desirable qualifications include the completion of a recognized conservation training program, formal apprenticeship, or demonstration of a similar level of education and experience, and a minimum of three years experience in conservation and a thorough knowledge of conservation practices in paper conservation and specialized book repair, some experience in preservation planning and training with excellent communication skills, and a knowledge of conservation ethics, practices, documentation procedures and techniques employed with archival and library materials.

Head, Preservation Replacement

Responsibilities: Oversees reformatting of library materials for text preservation, including replacement by microfilming and other methods of text copying. Undertakes photographic work for Library System for preservation replacement and exhibit purposes. Oversees and supervises photographic laboratory. Recommends new equipment, uses, and upgrades for preservation which may include magnetic or digital formatting.

Specialized qualifications: Professional photographic training and experience. Knowledge of advanced methods for text reformatting and preservation. Knowledge of proper handling of library materials for preservation.

Head, Commercial Binding

Responsibilities: Oversees and coordinates commercial binding activities for the Library System. Trains and supervises Commercial Binding Team assistants in gathering materials for shipment to commercial bindery and coordinates dispersal of materials received from bindery.

Specialized qualifications: Knowledge of binding methods and practices. Communication skills, knowledge of proper handling of materials to preserve and protect them.

OTHER PROFESSIONAL STAFF (UNDER HEAD CONSERVATOR):***Book Conservator**

Responsibilities: Oversees in-house binding operation. Undertakes restoration binding for special collections. Trains and supervises binding staff in conservation binding methods, such as making boxes and repairing bindings. Assists in exhibit preparation for books.

Specialized qualifications: Degree from a recognized book conservation program and three years experience or relevant equivalent experience in an apprenticeship program. Knowledge of conservation restoration binding practices and book box construction methods. Supervisory experience desired.

***Paper Conservator**

Responsibilities: Undertakes and trains assistants in paper repair. Undertakes paper restoration for special materials, such as deacidification, chemical testing, vellum repair of documents and archival materials. Assists in exhibition preparation of documents.

Specialized qualifications: Degree from a recognized paper conservation program and three years experience, or relevant equivalent experience in apprenticeship program. Knowledge of paper restoration practices and exhibit display methods. Supervisory experience desired.

SUPPORT STAFF:***Clerk/Secretary**

Responsibilities: Undertakes record keeping, file management, correspondence for unit.

Specialized qualifications: Word processing experience desirable. Knowledge of proper handling of library materials for preservation.

Mending/Boxing Assistant

Responsibilities: Under supervision of Conservator Binder, undertakes minor repair of bindings and makes boxes to preserve library materials.

Specialized qualifications: Manual dexterity. Knowledge of proper handling of library materials for preservation.

In-House Binding Assistant

Responsibilities: Under supervision of Conservator Binder, undertakes general binding of library materials by hand using preservation materials and techniques.

Specialized qualifications: Manual dexterity. Knowledge of proper handling of library materials for preservation.

Microfilm Lab Assistant

Responsibilities: Undertakes microfilming for text preservation.

Specialized qualifications: Previous photographic experience, preferably including microfilming. Knowledge of preservation issues related to microfilming and proper handling of materials.

Copy (for preservation) Assistant

Responsibilities: Undertakes photocopying for text preservation/reformatting.

Specialized qualifications: Knowledge of photocopying practices and use of equipment, and impact upon library materials. Knowledge of proper handling of library materials, especially rare, fragile and brittle items.

***Commercial Binding Team Assistant(s) (two)**

Responsibilities: Under supervision of Head, Commercial Binding, gathers and prepares library materials for shipment to commercial bindery.

Specialized qualifications: Knowledge of proper handling of library materials for preservation.

APPENDIX D

CONDITION OF THE COLLECTIONS AND TEMPERATURE & HUMIDITY GRAPHS

APPENDIX D

CONDITION OF THE COLLECTIONS
AND TEMPERATURE & HUMIDITY GRAPHS

The Task Force on the Physical Condition of the Collections surveyed the condition of 19 libraries across campus. The results are summarized in Figures 1-4.

Figure 1 shows the extent and types of volume deterioration which are found in the Central Library System as represented by the 19 surveyed libraries. Overall, 16% of the volumes surveyed were in poor condition, 32% were in fair condition and 52% were in good condition.

Figure 2 shows the extent of volume deterioration in each of the 19 surveyed libraries. The Gerontology Library is clearly in the best condition with 97% of the collection in good condition. The Department of Special Collections is in the worst condition with 60% of its collection in poor condition.

Figure 3 demonstrates the relative condition of volumes in the Central Library System (as represented by the 19 surveyed libraries) as a function of date of publication. Books published prior to about 1930 are more likely to be in poor condition and, prior to about 1955, to be in fair condition than in good condition in the Library as a whole.

Figure 4 shows the extent of deterioration in the Central Library System (as represented by the 19 surveyed libraries) as a function of place of publication. Books originating in Latin America have a much greater likelihood of being in poor condition than books originating elsewhere. The graph is also useful in characterizing the relative numbers of volumes in the collections published in various areas of the world.

The Task Force on Environmental Conditions assembled temperature and humidity information in several locations of the Central Library System. Summaries of the results of an analysis of that data for four specific locations are given below as examples (Figures 5-8) in conjunction with condition of the collections graphs on those same locations from the Task Force on the Physical Condition of the Collections.

Doheny Memorial Library was chosen as one location since it contains the largest collection of any library on campus. East Library Storage was chosen because, in many respects, it represents a cross-section of many collections which continues to grow and is also the final storage site for materials still a part of the Central Library System. The Hoose Library of Philosophy was selected because it is notorious as having one of the worst climactic environments in the Central Library System. The Architecture and Fine Arts Library was selected because, comparatively, it is one of the most climactically satisfactory environments for library materials surveyed on campus, although even it is not ideal.

Four graphs are presented for each location. The first graph demonstrates the temperature (in degrees Fahrenheit) and relative humidity of the location taken

three times a day for a period of two weeks (11-22 April 1988). The second, third, and fourth graphs demonstrate the condition of the books in the location as surveyed during the same period as the first graph. The second graph is by type of volume deterioration, the third graph is by decade of publication, and the fourth graph is by place of publication.

Figure 5: Doheny Memorial Library

The temperature, during the sampled period, was always too high (up to 83°F on several occasions) and fluctuated over a 10°F range. The relative humidity readings fell within suggested ranges for most of the study but fluctuated below desired levels on 8 occasions (3 days). About 13% of the books in the Doheny stacks were in poor condition. Most of these volumes date from prior to World War II and were published in the United States or Europe.

Figure 6: Hoose Library of Philosophy

The temperature was generally too high during the first week of testing (going as high as 80°F) but fell within accepted levels by the second week. Temperatures tended to rise through the course of any given day resulting in a temperature higher than the maximum recommended by the afternoon. Overall, the temperature fluctuated more than 20°F over the 2 week period. The relative humidity fluctuated wildly over the entire sampled period ranging from a low of 37% to a high of 79%. Nearly 25% of the books in Hoose were in poor condition. Most of those in poor condition date from 1860 to 1950 and were published in Europe.

Figure 7: East Library Storage

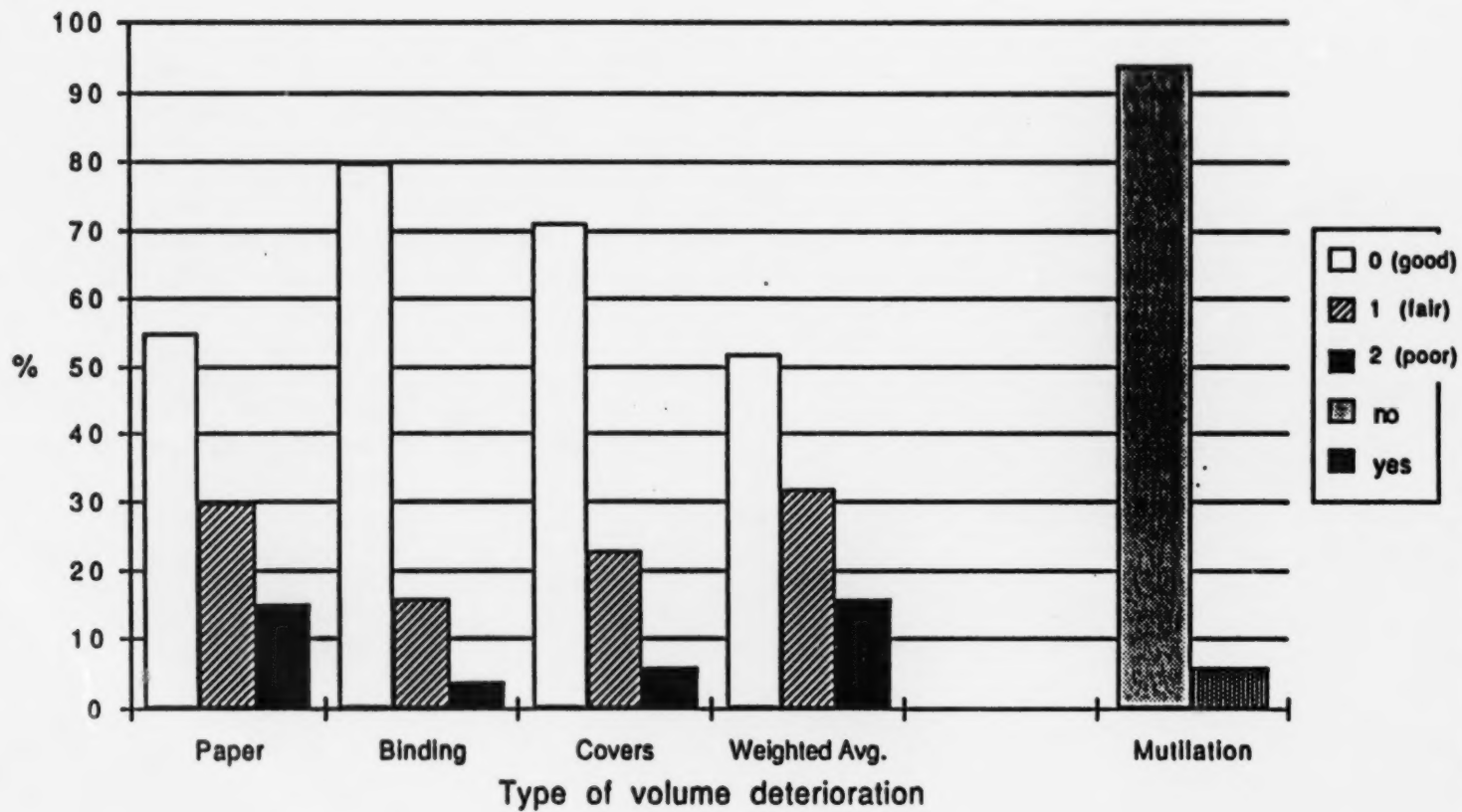
The facility was closed for part of the sample period and therefore only one week's worth of temperature and humidity readings could be obtained. During that period, the temperature was from 5°F to 15°F warmer than the maximum recommended. Daily and day to day fluctuations were minimal. Relative humidity, on the other hand, did fluctuate more drastically from as much as 6% RH below recommended levels most of the time to within acceptable levels for a third of the readings. Nearly 40% of the collection was in poor condition. Most of those volumes were published prior to World War II and came from the United States or Europe.

Figure 8: Architecture and Fine Arts Library

Although the temperature was about 5°F warmer than ideal throughout the tested period, it was generally very constant. The relative humidity fell within accepted ranges for nearly the entire sample. Only 3% of the volumes were in poor condition with those materials from Europe prior to 1960 predominating.

All Surveyed Libraries

Figure 1



Volume Condition by Location
(weighted average (i.e. paper, bindings,
& covers combined; mutilation excluded))

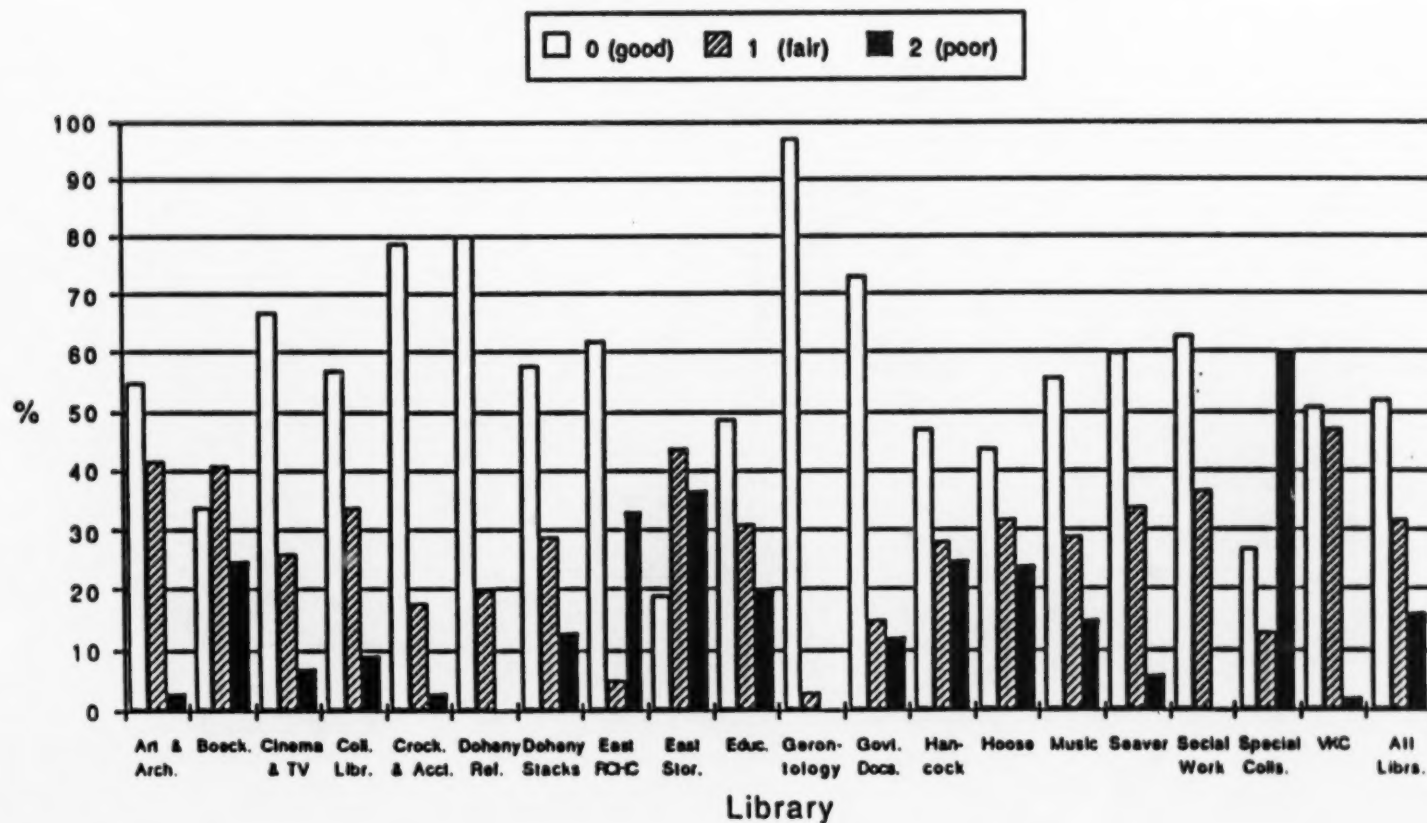


Figure 2

All Surveyed Libraries Condition by Decade of Publication

Figure 3

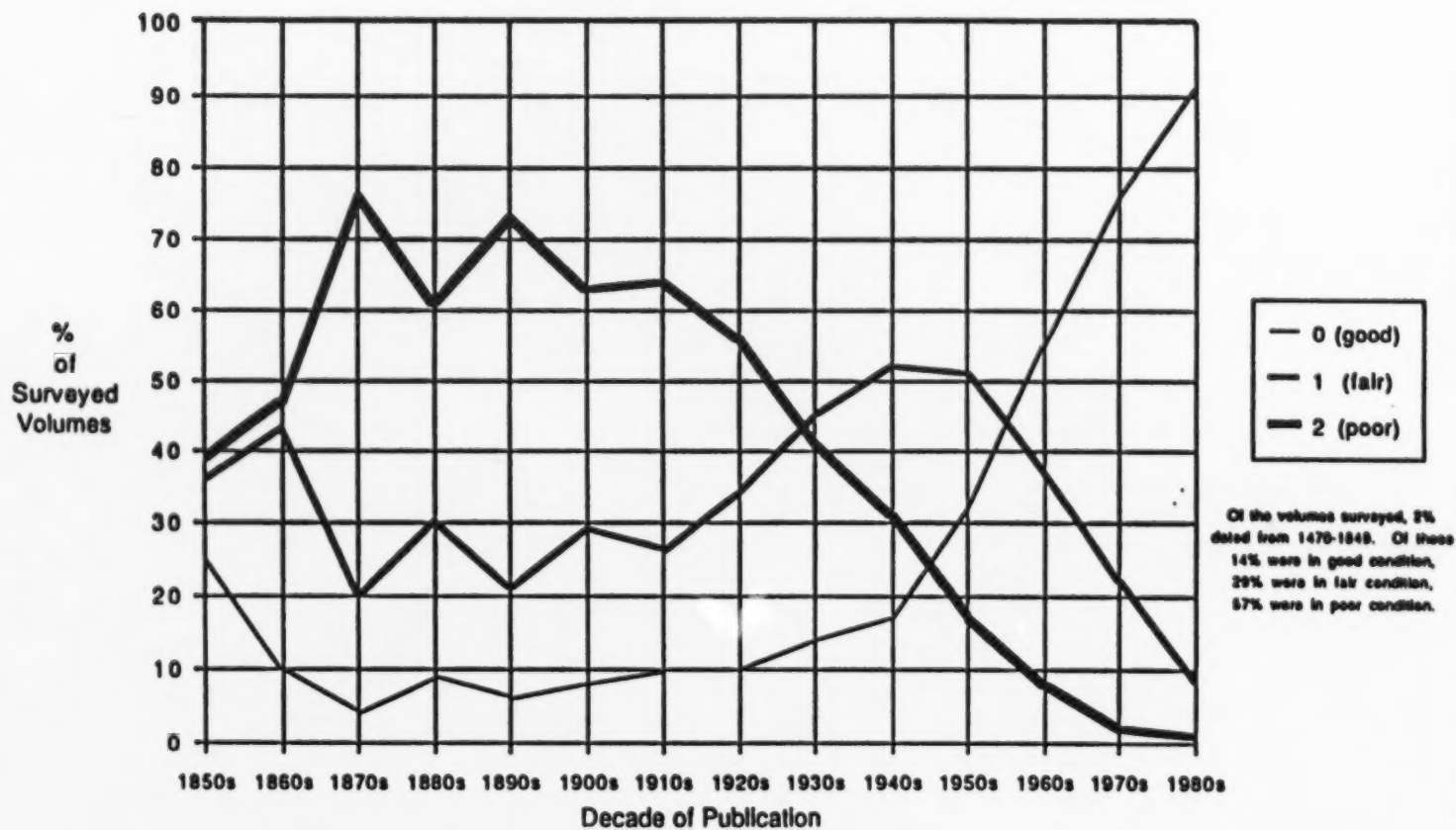
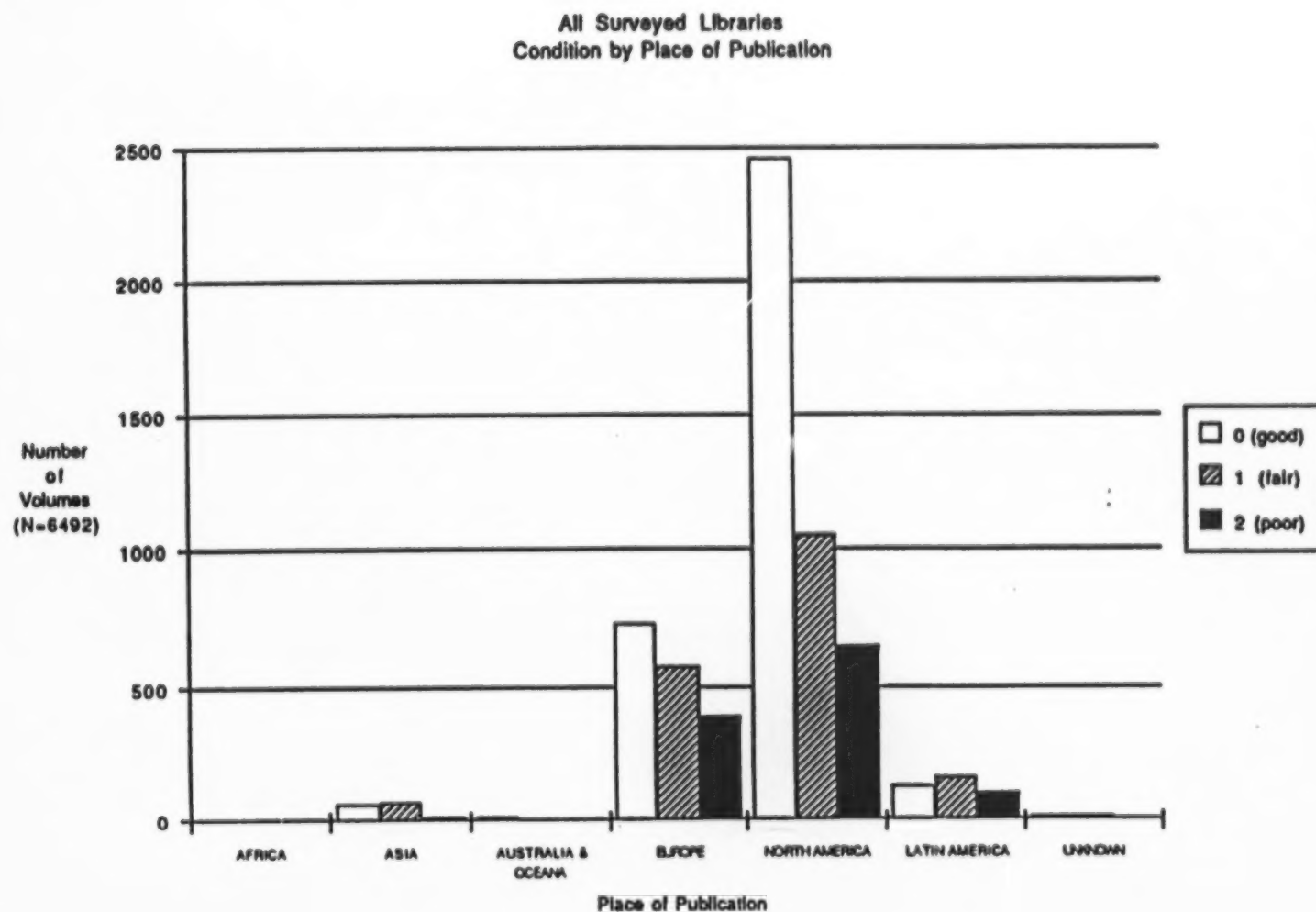


Figure 4



Doheny Memorial Library Stacks

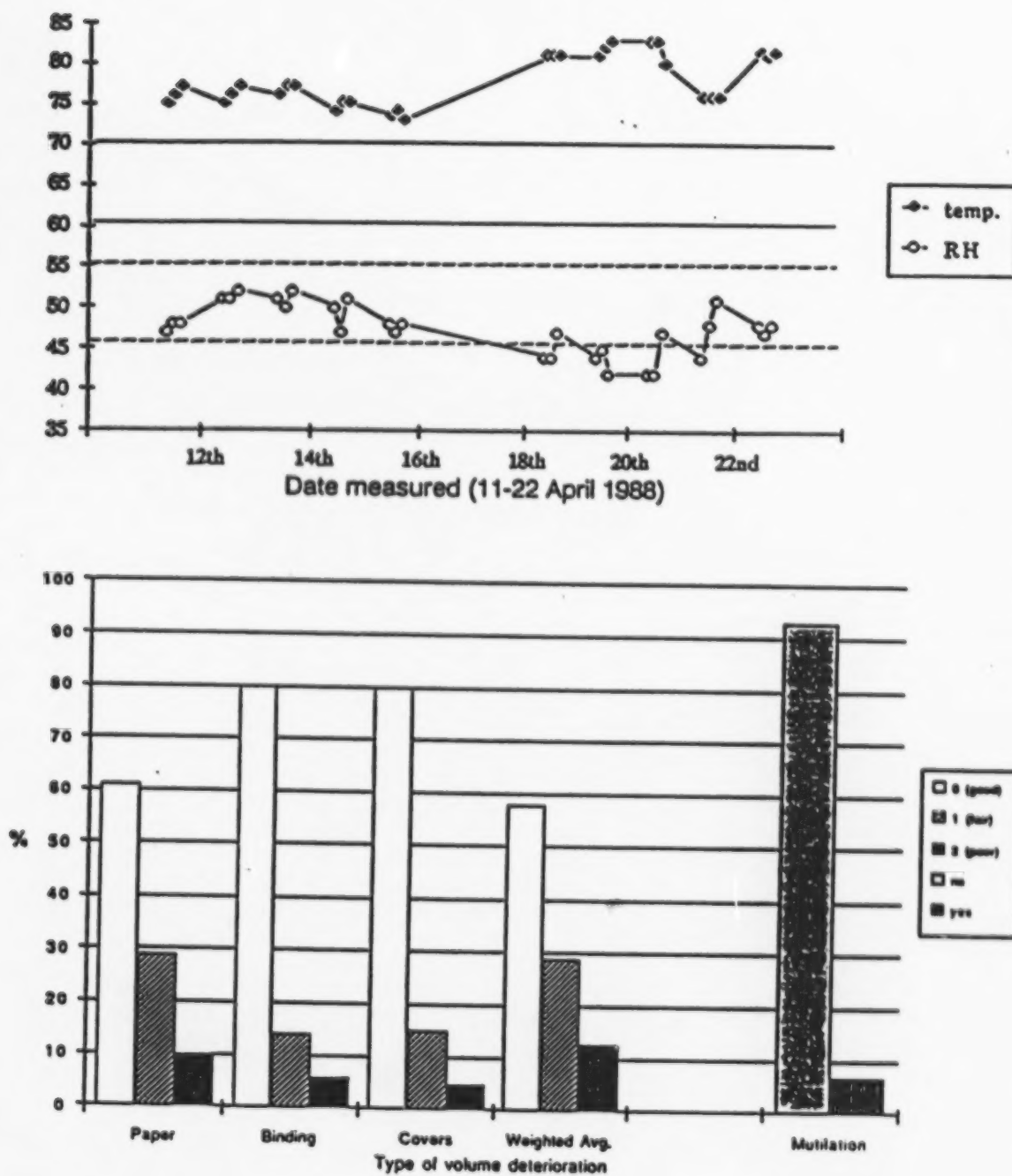
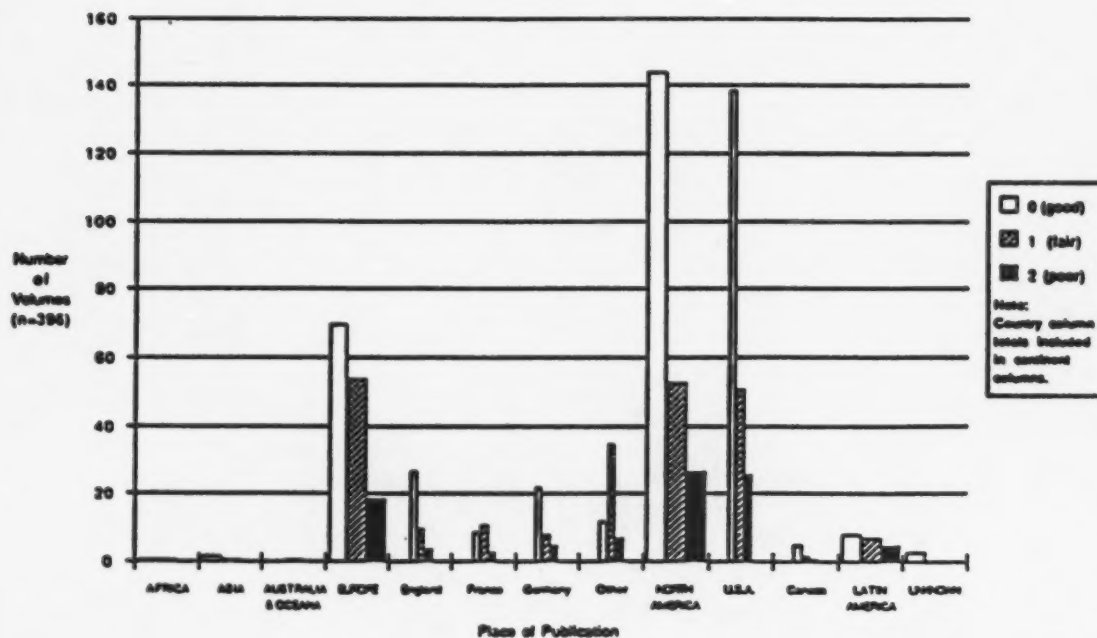
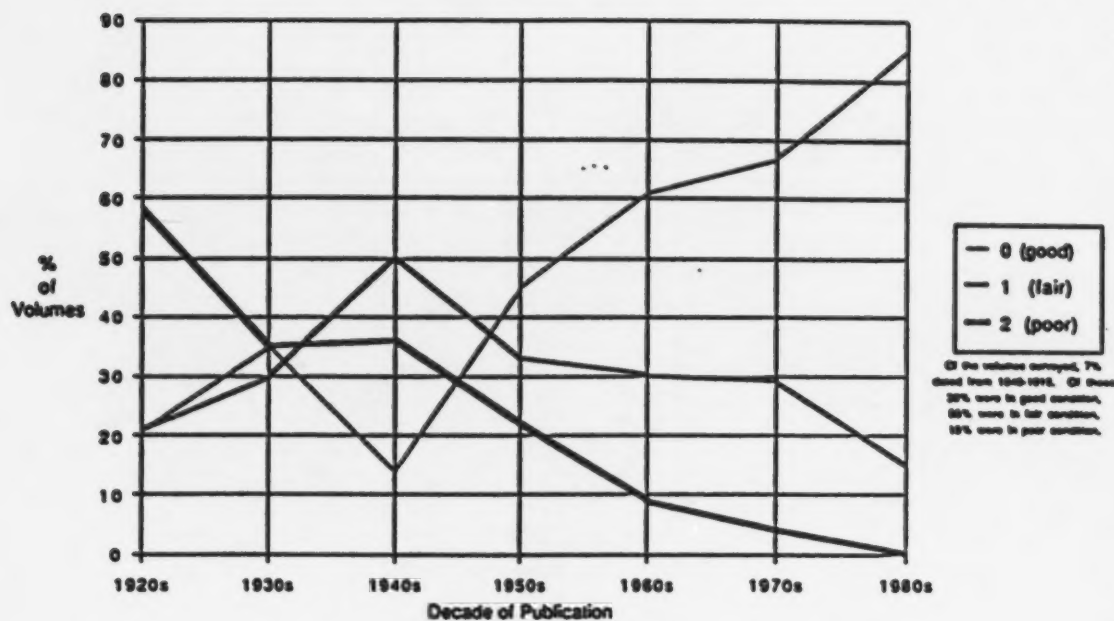


Figure 5

Condition by Decade of Publication



Hoose Library of Philosophy

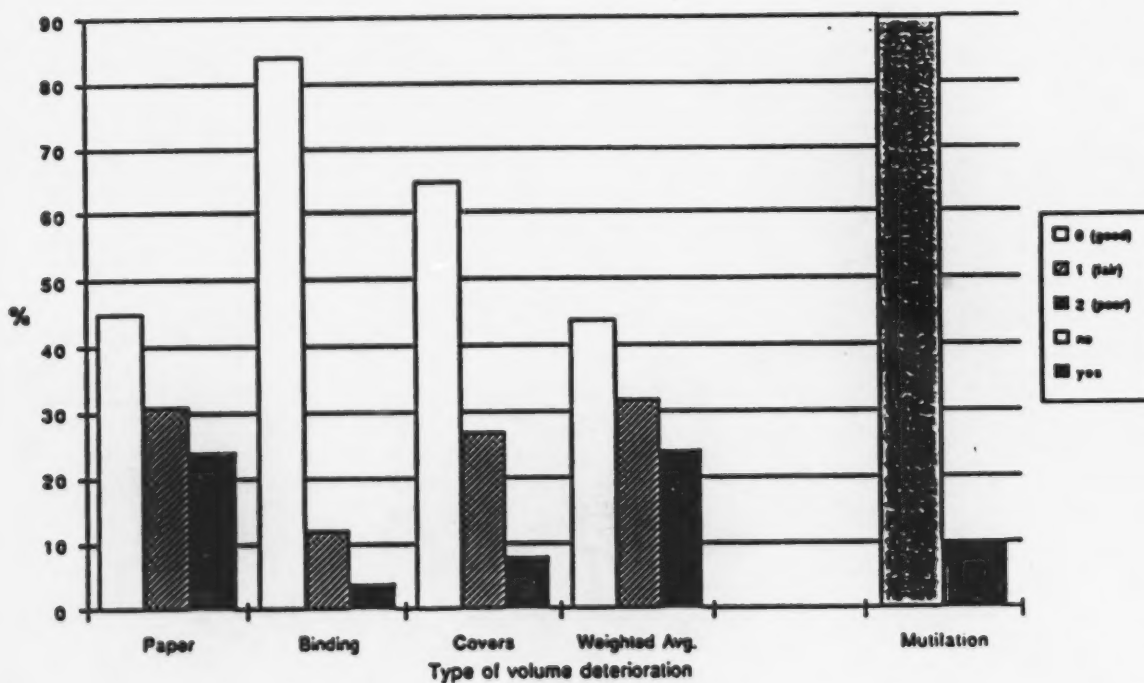
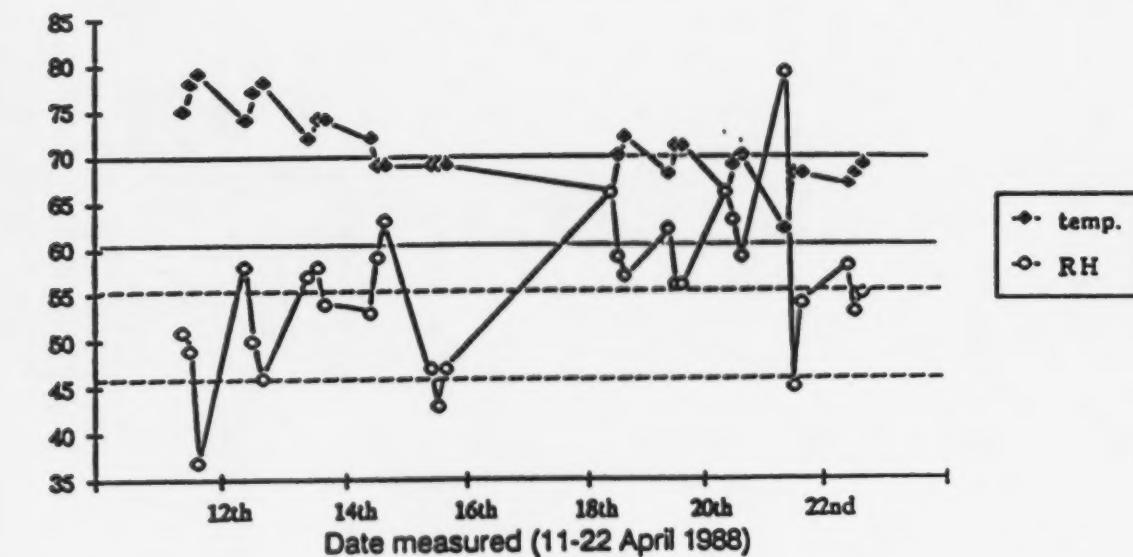
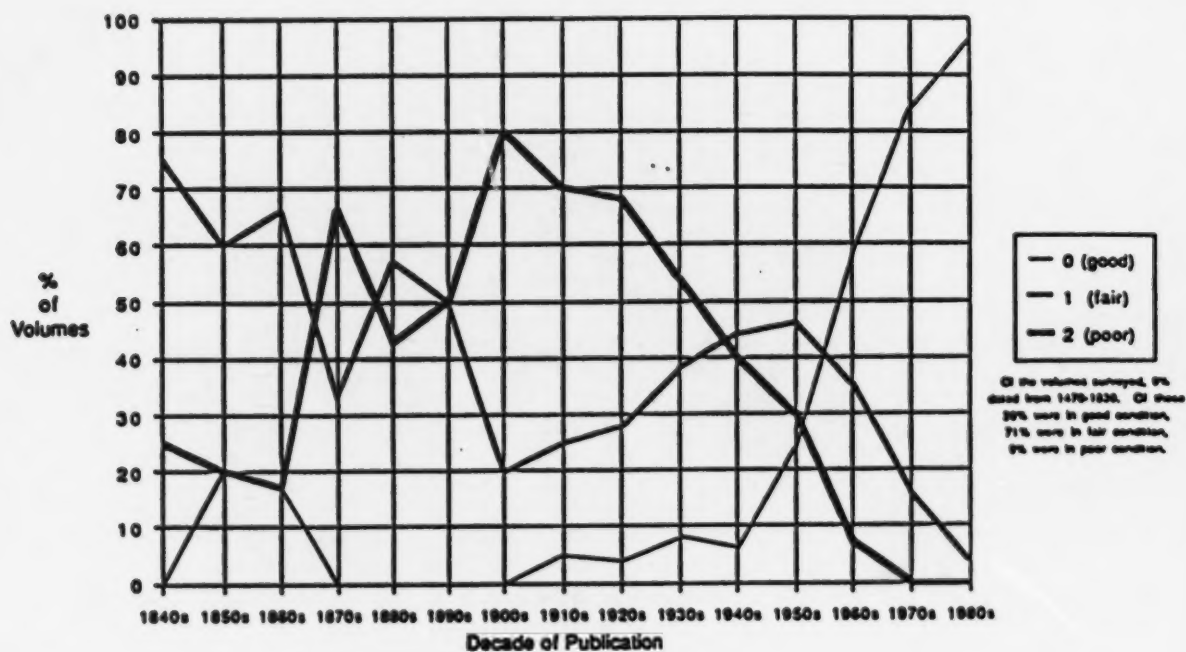
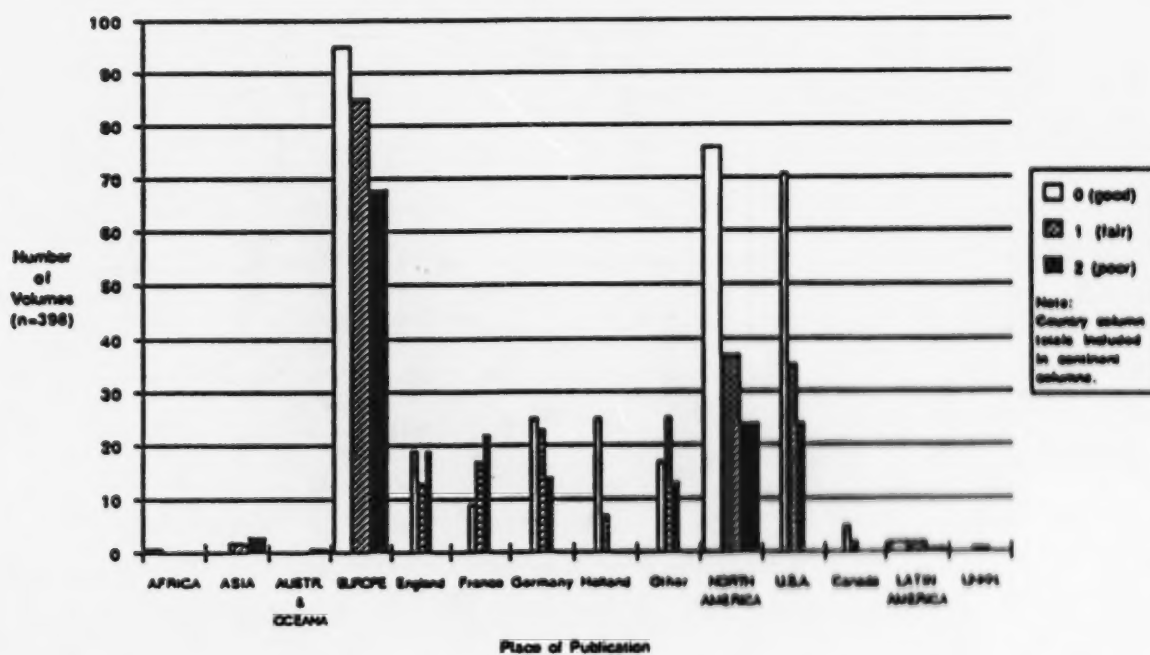


Figure 6

Condition by Decade of Publication



Condition by Place of Publication



East Library Storage

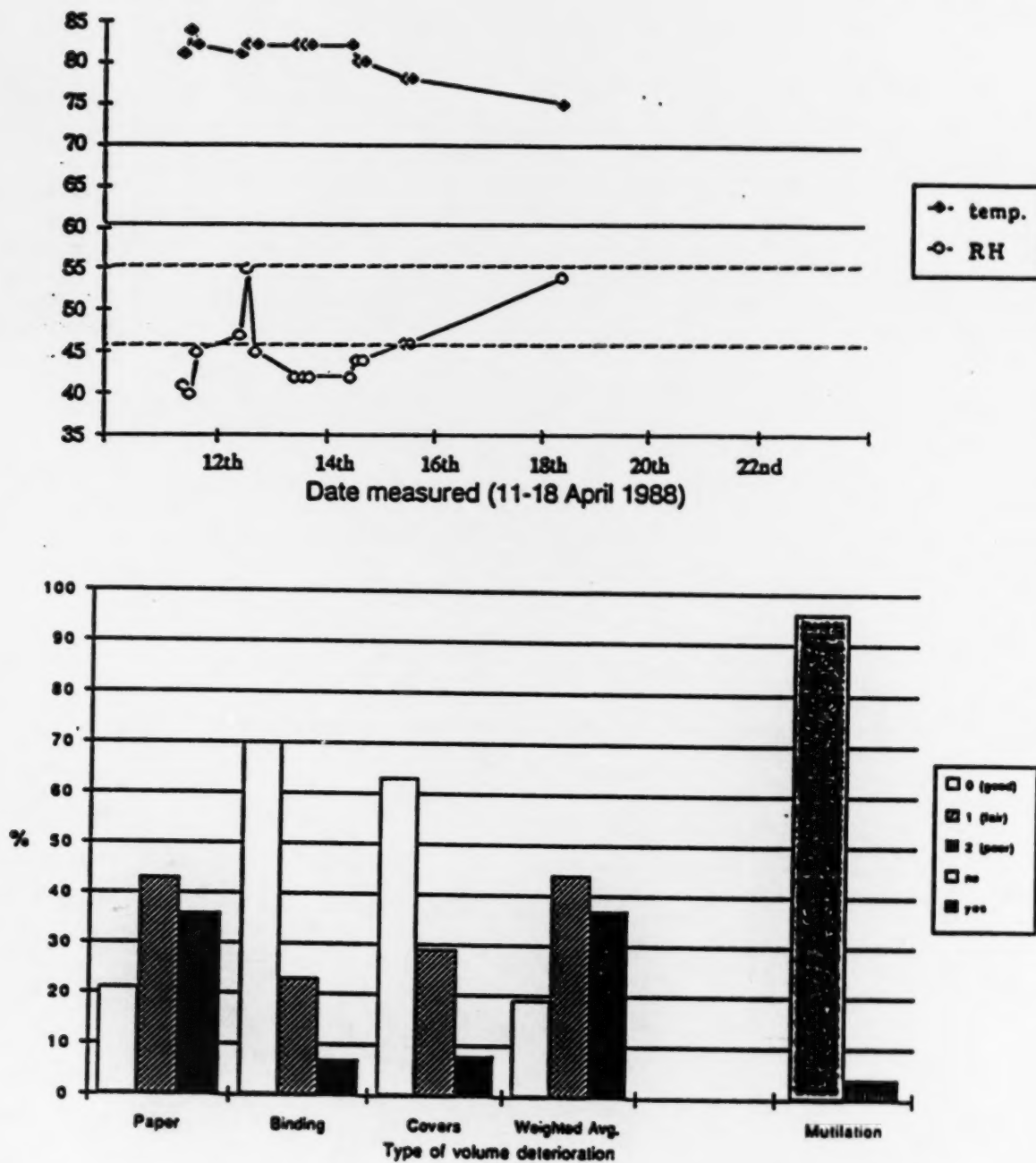
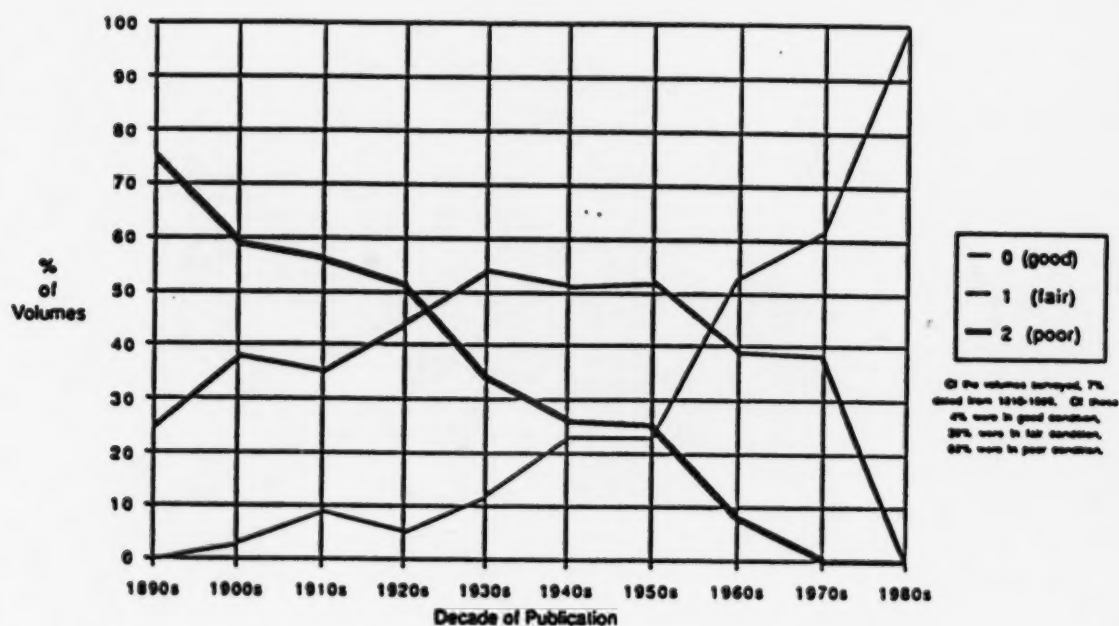
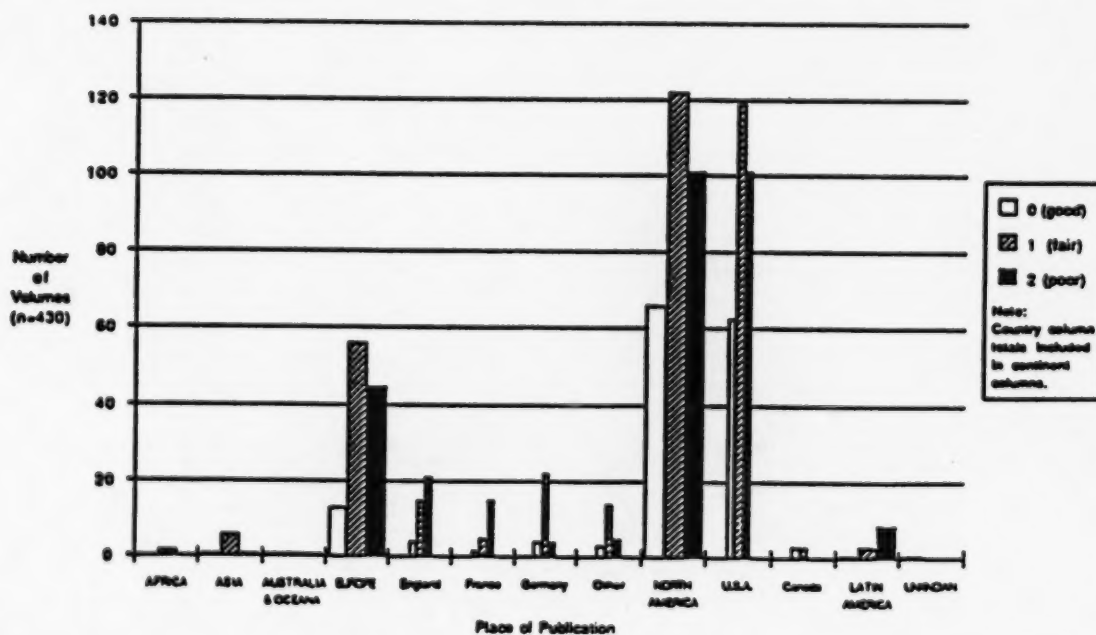


Figure 7

Condition by Decade of Publication



Condition by Place of Publication



Architecture and Fine Arts Library

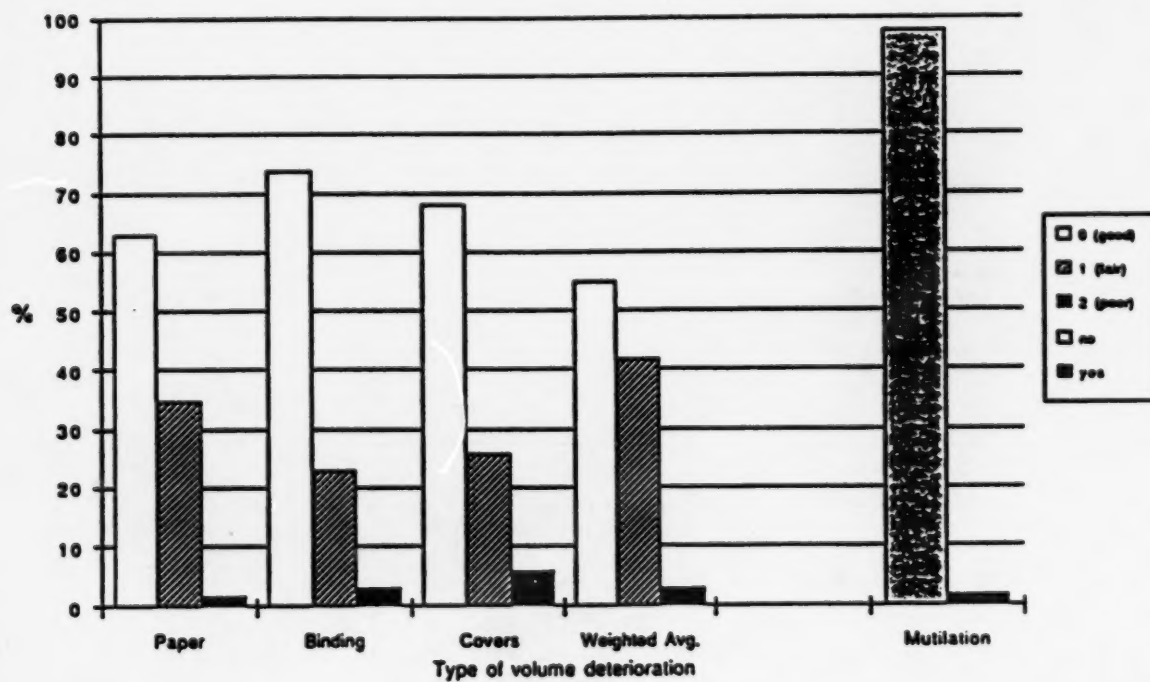
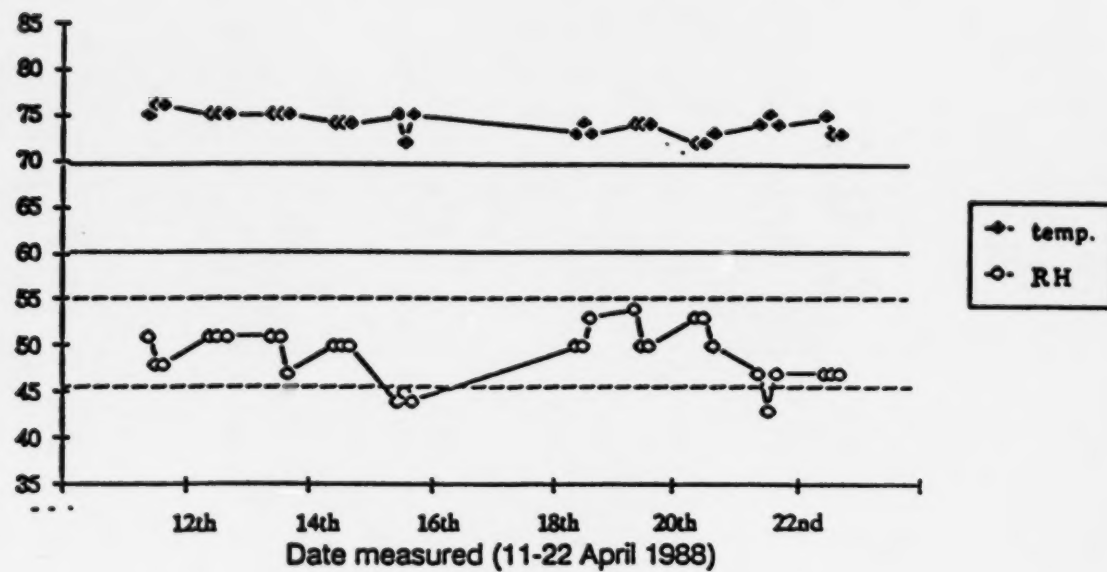
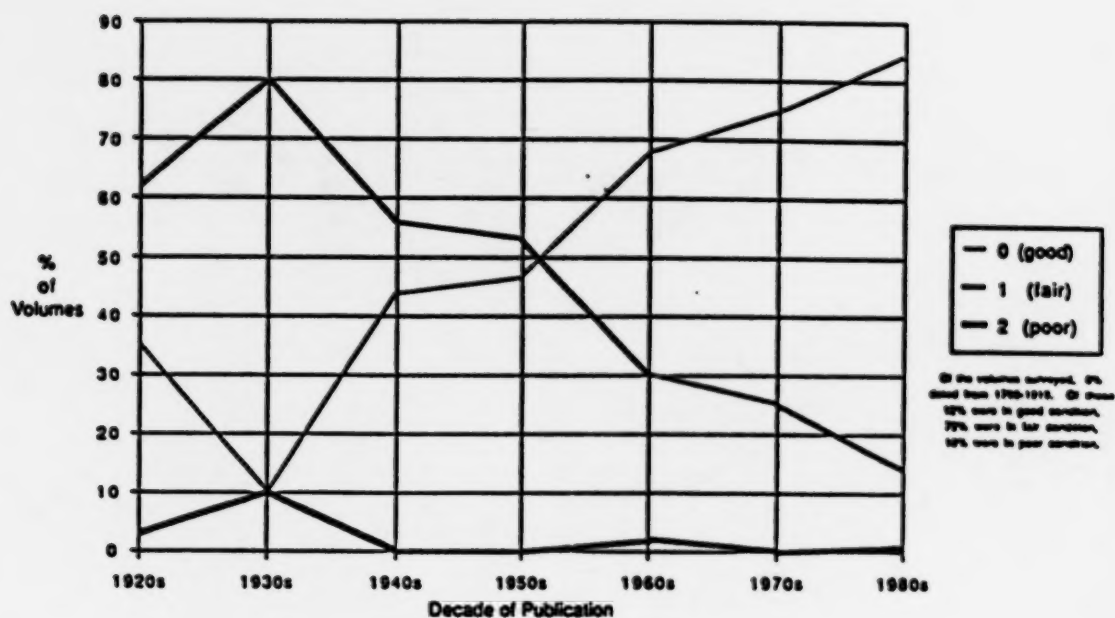
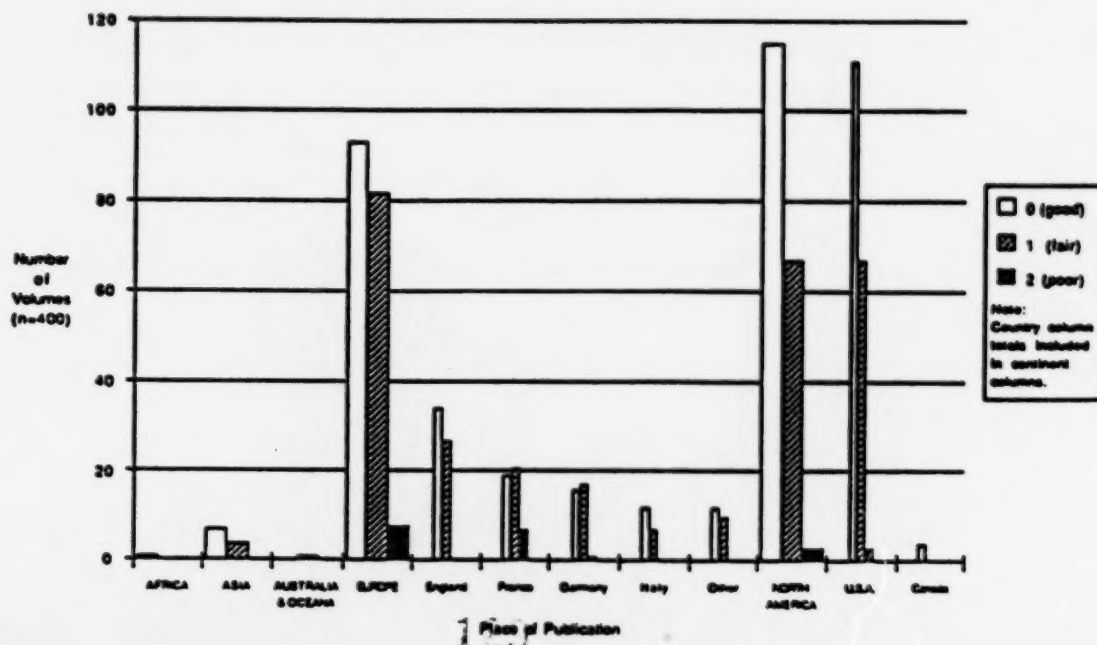


Figure 8

Condition by Decade of Publication



Condition by Place of Publication



APPENDIX E

BASIC PRESERVATION SUPPLIES

APPENDIX E

BASIC PRESERVATION SUPPLIES

EQUIPMENT AND FURNITURE	\$64,937
MATERIALS AND TOOLS	\$3,224
SUPPLIES	\$2,853
TOTAL	\$71,014

EQUIPMENT AND FURNITURE	QUANTITY	PRICE
Board Creaser	1	650
Board shears (43x28x28"), 970 lbs. cutting length 43"	1	3,995
Board cloth storage unit	1	800
Book cases (7x3x12") @ \$170	10	1,700
Book press (nipping press, minimum platen size: 14x18")	1	700
Bookbinding presses		
Standing press	2	710
Wood lying	1	.98
Chairs		
Desk (3 @ \$217)	3	651
Drafting (10 @ \$132)	10	1,323
Computers		
IBM PS/II	1	3,000
GEAC	1	1,000
Corner rounder	1	147
Desk (3 @ \$625)	3	1,875
Drying rack	1	.98
Encapsulating machine	1	10,000
File cabinet	1	149
Flat files (4 @ \$624)	4	2,496
Fume hood	1	5,000
Guard caster	1	100
Hardbed lamination press	1	3,000
Kensol stamping press	1	1,000
Leaf caster	1	1,000
Lights (clamp-on, adjustable, with incandescent bulbs)	2	165
Light table	1	1,000
Locker	1	535
Paper cutter (heavy-duty, table-top, blade between 30" & 36")	1	520
Phase box maker	1	650
Scale	1	100
Sewing frame (30" wide)	1	150
Sink (large, stainless steel)	1	2,000
Stool (wooden; legs may be cut to desired height)	1	.95
Storage cabinet (metal, with shelves)	1	3,500
Suction table	1	1,000
Table (4x6', with Formica top and storage shelves underneath)	1	400
Trash cans (10 @ \$20)	10	200
Vacuum cleaner	1	130
Work bench, built in (50 linear feet at \$300 per ft)	1	15,000
TOTAL		\$64,937

APPENDIX E

MATERIALS AND TOOLS	QUANTITY	PRICE
Adhesive containers (12 @ \$0.75)	12	9
Air bulb	1	2
Airplane linen (20 yds @ \$20)	20 yds	400
Awls #4 (6 @ \$1.15)	6	7
Beeswax (6 @ \$.75)	6	5
Blotting paper	1	.25
Beakers (200ml)	12 pack	.30
Board		
File folder stock, 42x60" (100 @ \$1.28)	100	128
Lignin free, 35x40" (500 @ \$3.15)	500	1,575
Binder's, .080" 26x38" (2 @ \$27.75)	2	.55
Binder's, .100" 26x38" (2 @ \$27.75)	2	.55
Backing (6 @ \$25)	6	150
Bone folders (at least 1 per worker)	5	.20
Lettering tools		
Brass type (150 + pieces)	.2 sets	250
Type holder	1	.60
Type trays	2	.10
Brayer	1	.5
Brushes (1 wet, 1 dry) (per worker)	10	.80
Chisel	1	.5
Eye hammer	1	.2
Hammer	1	.20
Knives, utility with disposable blades	2	.10
Magnifier, linen tester (5x)	1	.26
Microspatula	2	.16
Needles (#3 darning)	1	.15
Pliers, nipping	1	.15
Punch, leather hole	1	.24
Ruler	1	.21
Ruling pen	2	.18
Scalpel handle	2	.25
Scalpel blades, #23	48	.34
Scissors, small & large	1	.55
Staple remover	1	.3
Straight edge	1	.18
Triangle, metal	1	.9
TOTAL		\$3,224

SUPPLIES	QUANTITY	PRICE
Absorene wallpaper cleaner	24	.76
Binding tape, linen (10yds, 5x1")	4 rolls	.16
Book cloth		
Joanna Buckram Group D heavyweight		
Blue	10 yds	.57
Green	10 yds	.57
Rust	10 yds	.57
Oxford medium weight		
Blue	10 yds	.47
Deep red	10 yds	.47
Bookbinders shears	6	.82

Cheese grater	1	5
Cleaning supplies		
Glassware cleaner	1 bottle	5
Lysol	.1 can	3
Soap	5 bars	3
Colored lettering foil (1" wide)	6 rolls	12
Cotton swabs	2 boxes	8
EM Laboratory colorpHast Indicator sticks	.1 box	.25
Erasers		
Magic rub, vinyl	.1 doz	7
Magic Rub peel-off pencil	2	.22
Gloves, white cotton knit	24	.24
Grid	1	.55
Head bands (10yds, size 2)	2 rolls	.20
Hot plate	1	.35
Lig-free board (.040" & .060" thick; pH 8.5-9.2)	25	547
Linen tape (1" x 300yds)	.1 roll	.35
Mat board	10	200
Merck strips	10	.13
MESS kits	10	250
Methyl cellulose	.1 lb	.21
Mounting corners	5 boxes	.40
Neat's-foot oil and lanolin	.1 gal	.40
One-wipe treated dust cloths	24	.56
Opaline dry cleaning	24	.28
Paper		
Blotting, 32x40", neutral pH drying	100	145
Bond (pH 8.5)	5 reams	.50
Japanese mending	10	.80
Kozo mending	10	.50
Sekishu mending	10	.36
Paper test kit	1	.30
Pencils, mechanical	6	.12
Plate glass	2	4
Polyester film, 3mil, 10x12"	500	150
Polyester web	.1 yd	.30
Potassium lactate	.1 gal	.30
Reemay 38" x 30yds	.1 roll	.28
Rivets (5/16" head)	2 pkgs	.10
Sieve	1	.52
Skum-X (Dietzgen)	.3 lbs	.20
Tacking iron with stand	1	.95
Thread, heavy linen	1 spool	.25
Tweezers	2	.43
Water, Deionized	.6 gal	6
Wheat paste, dry powder #301	.2 lbs	.50
Wheat starch, Aytex-P	.2 lbs	.14
TOTAL		\$2,853

APPENDIX F

GUIDELINES FOR DISASTER ACTION PLAN

APPENDIX F

GUIDELINES FOR THE DISASTER ACTION PLAN

In examining the various libraries within the USC Library System it was obvious to the Task Force on Disaster Control and the Study Team that we are presently not well prepared or equipped to respond to a major crisis. There has been no adequate training of personnel, no systematic purchase of disaster supplies and equipment needed to respond to emergencies, no guidelines for responding to a disaster, and no clear delineation and delegation of responsibility for disaster prevention and response. For these reasons we recommend the appointment of a task force to develop a Disaster Action Plan for the USC Library System. The following elements are suggested steps for such a plan.

1. Draft procedural instructions for all staff on first steps in response to a disaster.
2. Identify staff with key responsibilities or expertise to be called on for assistance and important telephone numbers.
3. List and establish a location for emergency supplies to be stocked at all times. List supplies for each unit's disaster kit.
4. List sources for prompt acquisition of additional supplies, equipment, or assistance when needed.
5. Create guidelines for determining salvage priorities in the event of a major disaster.
6. Plan for periodic training or awareness sessions to keep all staff informed about emergency procedures.
7. Develop a mechanism for periodic review and updating of the plan.
8. Set up an accounting system for any emergency to assist in insurance claims and the recovery program.
9. Keep an updated list or file of local and regional preservation resources in the event of a disaster.
10. Develop an emergency manual that contains all necessary procedures, instructions, preventive measures, and preparations for response to water, fire and earthquake damage to the library.

APPENDIX G

GRANT SOURCES

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GRANT SOURCES

Preservation is a continuous process requiring continued support to sustain and a continuous infusion of funds in order to carry out a successful program. USC should seek grant funding after addressing concerns such as inadequacy of book funds, staff and user preservation training and education, identification of preservation priorities within the collection by selectors, selection of appropriate types of preservation activities and costs, and finally the preparation of a plan. Outside funding should not be seen as a panacea but as one of many alternatives. It is also essential to know what is being done by other institutions so that our efforts harmonize nationally.

A number of national, state, and local agencies and foundations provide funds for preservation activities, internships, facilities and equipment, staff and user education, and microfilming. In the state, the California State Library should be contacted for information on funding for cooperative projects. The Task Force on Interinstitutional Cooperation identified and listed many in their report. Listed here are several of the nationally significant funding agencies. (Additional information can be obtained from the *Foundation Directory* and the *Grants Index*, both online, in Doheny Reference.)

Andrew W. Mellon Foundation
140 East 62nd Street
New York, NY 10021
(212) 838-8400

Type: Grants in support of higher education, cultural activities, and selected programs in conservation, etc.

National Endowment for the Humanities
Office of Preservation, Room 802
1100 Pennsylvania Avenue, NW
Washington, DC 20506
(202) 786-0200

Type: Interpretation and conservation of museum collections, improved access to sources for advanced research in the humanities, preservation of research materials documenting the humanities.

National Historical Publications and Records Commission
National Archives and Records Administration
Washington, DC 20408
(202) 523-5386

Type: Improved preservation and availability of documents relating to American history.

Olin Foundation, Inc.
805 Third Avenue
New York, NY 10022
(212) 832-0508

Type: Grants for constructing and equipping academic buildings and libraries.
Purpose: To provide adequate, improved and expanded facilities to meet educational needs.

Title II-C of the Higher Education Act
Department of Education
Contact: Library Development Staff
Library Programs, OERI
United States Department of Education
555 New Jersey Avenue, NW
Washington, DC 20208-5571

Type: Bibliographic control, collection development and preservation of materials held by major research libraries.

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